

=====  
 Ex.No. : 1

Study of all SQL commands

=====

**DDL COMMANDS:**

SQL> CREATE TABLE STUDENT (Roll\_No Number(3),Name VARCHAR2(40));

Table created.

SQL> ALTER TABLE STUDENT ADD Total NUMBER(3);

Table altered.

SQL> Desc student

Name	Null?	Type
-----	-----	-----
ROLL_NO		NUMBER(3)
NAME		VARCHAR2(40)
TOTAL		NUMBER(3)

SQL> ALTER TABLE STUDENT ADD Compare VARCHAR2(4);

Table altered.

SQL> DESC STUDENT;

Name	Null?	Type
-----	-----	-----
ROLL_NO		NUMBER(3)
NAME		VARCHAR2(40)
TOTAL		NUMBER(3)
GRADE		VARCHAR2(2)
COMPARE		VARCHAR2(4)

SQL> ALTER TABLE STUDENT DROP COLUMN COMPARE;

Table altered.

SQL> DESC STUDENT

Name	Null?	Type
-----	-----	-----
ROLL_NO		NUMBER(3)
NAME		VARCHAR2(40)
TOTAL		NUMBER(3)
GRADE		VARCHAR2(2)

```
SQL> RENAME STUDENT TO STUDENTDB;
```

Table renamed.

```
SQL> DESC STUDENTDB;
```

Name	Null?	Type
ROLL_NO		NUMBER(3)
NAME		VARCHAR2(40)
TOTAL		NUMBER(3)
GRADE		VARCHAR2(2)

### CONSTRAINTS:

```
SQL> alter table studentdb add primary key(roll_no);
```

Table altered.

```
SQL> CREATE TABLE S1 (EMP_ID NUMBER(3) not null);
```

Table created.

```
SQL> alter table s1 add emp_sprno number(3);
```

Table altered.

```
SQL> alter table s1 add unique(emp_sprno);
```

Table altered.

```
SQL> alter table s1 add (emp_deptno number(3),emp_seatno
number(4));
```

Table altered.

```
SQL> alter table s1 add primary key (emp_id);
```

Table altered.

```
SQL> desc s1
```

Name	Null?	Type
EMP_ID	NOT NULL	NUMBER(3)
EMP_SPRNO		NUMBER(3)
EMP_DEPTNO		NUMBER(3)
EMP_SEATNO		NUMBER(4)

```
SQL> create table sub (sub_no number(5) not null,sub_name
varchar2(10) unique,no_periods number(3) check (no_periods between
30 and 50), stud_id number(3) references studentdb (roll_no));
```

Table created.

```
SQL> desc sub
Name                                Null?    Type
-----
SUB_NO                               NOT NULL NUMBER(5)
SUB_NAME                             VARCHAR2(10)
NO_PERIODS                            NUMBER(3)
STUD_ID                               NUMBER(3)
```

```
SQL> INSERT INTO SUB VALUES (6,'WEB',7,53);
INSERT INTO SUB VALUES (6,'WEB',7,53)
*
ERROR at line 1:
ORA-02290: check constraint (EXAM70.SYS_C006136) violated
```

```
SQL> INSERT INTO SUB VALUES (6,'WEB',45,57);
INSERT INTO SUB VALUES (6,'WEB',45,57)
*
ERROR at line 1:
ORA-00001: unique constraint (EXAM70.SYS_C006137) violated
```

```
SQL> INSERT INTO SUB VALUES (8,'DS',49,63);
INSERT INTO SUB VALUES (8,'DS',49,63)
*
ERROR at line 1:
ORA-02291: integrity constraint (EXAM70.SYS_C006138) violated -
parent key not found
```

### DML COMMANDS:

```
SQL> INSERT INTO SUB VALUES (6,'WEB',45,53);
```

1 row created.

```
SQL> INSERT INTO STUDENTDB VALUES (53, 'THANGAVEL',99,'S');
```

1 row created.

```
SQL> INSERT INTO STUDENTDB VALUES (62, 'PALANI MURUGAN',98,'S');
```

1 row created.

```
SQL> insert into student values(&ROLL_NO,&NAME,&TOTAL);
Enter value for roll_no: 115
Enter value for name: 'gugan'
Enter value for total: 266
old 1: insert into student values(&ROLL_NO,&NAME,&TOTAL)
new 1: insert into student values(115,'gugan',266)
```

1 row created.

```
SQL> SELECT * FROM STUDENTDB;
```

ROLL_NO	NAME	TOTAL	GR
53	THANGAVEL	99	S
62	PALANI MURUGAN	98	S

```
SQL> UPDATE STUDENTDB SET TOTAL=100 WHERE ROLL_NO=53;
```

1 row updated.

```
SQL> SELECT * FROM STUDENTDB;
```

ROLL_NO	NAME	TOTAL	GR
53	THANGAVEL	100	S
62	PALANI MURUGAN	98	S

```
SQL> INSERT INTO STUDENTDB (ROLL_NO,TOTAL,GRADE) VALUES (66,
87,'A');
```

1 row created.

```
SQL> SELECT * FROM STUDENTDB;
```

ROLL_NO	NAME	TOTAL	GR
53	THANGAVEL	100	S
62	PALANI MURUGAN	98	S
66		87	A

SQL> SELECT \* FROM STUDENTDB;

ROLL_NO	NAME	TOTAL	GR
53	THANGAVEL	100	S
62	PALANI MURUGAN	98	S
66		87	A

SQL> DELETE FROM STUDENTDB WHERE ROLL\_NO=66;

1 row deleted.

SQL> SELECT \* FROM STUDENTDB;

ROLL_NO	NAME	TOTAL	GR
53	THANGAVEL	100	S
62	PALANI MURUGAN	98	S

SQL> SELECT \* FROM STUDENTDB ORDER BY ROLL\_NO DESC;

ROLL_NO	NAME	TOTAL	GR
62	PALANI MURUGAN	98	S
53	THANGAVEL	100	S

SQL> DESC S1;

Name	Null?	Type
EMP_ID	NOT NULL	NUMBER(3)
EMP_SPRNO		NUMBER(3)
EMP_DEPTNO		NUMBER(3)
EMP_SEATNO		NUMBER(4)

SQL> TRUNCATE TABLE S1;

Table truncated.

SQL> SELECT \* FROM S1;

no rows selected

SQL> DROP TABLE S1;

Table dropped.

```
SQL> select * from tab;
```

TNAME	TABTYPE	CLUSTERID
ST	TABLE	
STDT	TABLE	
STNT	TABLE	
STUD	TABLE	
STUDENT	TABLE	
STUDENTDB	TABLE	
SUB	TABLE	

7 rows selected.

### DQL COMMANDS:

```
SQL> create table STUDENTDATABASE as (select * from STUDENTDB);
```

Table created.

```
SQL> select * from STUDENTDATABASE;
```

ROLL_NO	NAME	TOTAL	GR
53	THANGAVEL	100	S
62	PALANI MURUGAN	98	S

```
SQL> create table STUDENTDB1 ( NAME ) as (select name from
STUDENTDATABASE);
```

Table created.

```
SQL> DESC STUDENTDB1
```

Name	Null?	Type
NAME		VARCHAR2(40)

```
SQL> SELECT * FROM STUDENTDB1;
```

NAME
THANGAVEL
PALANI MURUGAN

```
SQL> CREATE TABLE STUDENTDB2 as ( select * from STUDENTDB1 where
name = 'Thangavel' );
```

Table created.

```
SQL> insert into STUDENTDATABASE (select * from STUDENT where
Stud_name='kala');
```

1 row created.

```
SQL> select stud_name name from student;
```

NAME

```
-----
kala
yalinee
nathiya
```

### TCL COMMANDS:

```
SQL> savepoint g;
```

Savepoint created.

```
SQL> CREATE TABLE STUDENT (Roll_No Number(3),Name VARCHAR2(40));
```

Table created.

```
SQL> ALTER TABLE STUDENT ADD Total NUMBER(3);
```

Table altered.

```
SQL> insert into student values (112, 'Thangavel' ,100);
```

1 row created.

```
SQL> update student set total=200 where Roll_no=112;
```

1 row updated.

```
SQL> rollback;
```

Rollback complete.

```
SQL> select * from student;
```

no rows selected

```
SQL> insert into student values (112, 'Thangavel' ,100);
```

1 row created.

```
SQL> update student set total=200 where roll_no=112;
```

```
1 row updated.
```

```
SQL> commit;
```

```
Commit complete.
```

```
SQL> select * from student;
```

ROLL_NO	TOTAL	NAME
112	200	Thangavel

### **MATHEMATICAL FUNCTIONS:**

```
SQL> select abs(-9.456) from dual;
```

```
ABS(-9.456)
-----
          9.456
```

```
SQL> select ceil(9.6767676) from dual;
```

```
CEIL(9.6767676)
-----
                10
```

```
SQL> select floor(6.5646456456456) from dual;
```

```
FLOOR(6.5646456456456)
-----
                        6
```

```
SQL> select mod(5,9) from dual;
```

```
MOD(5,9)
-----
          5
```



```
SQL> select power(10,9) from dual;
```

```
POWER(10,9)
-----
1.000E+09
```

```
SQL> select sqrt(6) from dual;
```

```
SQRT(6)
-----
2.4494897
```

```
SQL> select trunc(66.985354,3) from dual;
```

```
TRUNC(66.985354,3)
-----
66.985
```

```
SQL> select trunc(66.985354,2) from dual;
```

```
TRUNC(66.985354,2)
-----
66.98
```

```
SQL> select round(5.15456) from dual;
```

```
ROUND(5.15456)
-----
5
```

```
SQL> select round(5.8333) from dual;
```

```
ROUND(5.8333)
-----
6
```

```
SQL> select sin(56) from dual;
```

```
SIN(56)
-----
-.521551
```

```
SQL> select sin(30) from dual;
```

```
SIN(30)
-----
-.9880316
```

```
SQL> select cos(60/360) from dual;
```

```
COS(60/360)
-----
.98614323
```

```
SQL> select tan(100) from dual;
```

```
TAN(100)
-----
-.5872139
```

```
SQL> select log(10,2) from dual;
```

```
LOG(10,2)
-----
.30103
```

### STRING FUNCTIONS:

```
SQL> select lower('PALANI') from dual;
```

```
LOWER(
-----
palani
```

```
SQL> select upper('Thangavel') from dual;
```

```
UPPER('TH
-----
THANGAVEL
```

```
SQL> select rpad('Thangam',10,'ME') from dual;
```

```
RPAD('THAN
-----
ThangamMEM
```

```
SQL> select lpad('Thangam',10,'ME') from dual;
```

```
LPAD('THAN
-----
MEMThangam
```

```
SQL> select ASCII(65) from dual;
```

```
ASCII(65)
-----
          54
```

```
SQL> select chr(78) from dual;
```

```
C
-
N
```

```
SQL> select translate('Prłani','r','a') from dual;
```

```
TRANSL
-----
Pałani
```

```
SQL> select initcap('thangam') from dual;
```

```
INITCAP
-----
Thangam
```

```
SQL> select length('Thangavel') from dual;
```

```
LENGTH('THANGAVEL')
-----
                      9
```

```
SQL> select substr('Thangavel',3,5) from dual;
```

```
SUBST
-----
angav
```

```
SQL> select ltrim('Thangavel','a') from dual;
```

```
LTRIM('TH
-----
Thangavel
```

```
SQL> select ltrim('Thangavel','T') from dual;
```

```
LTRIM('T
-----
hangavel
```

```
SQL> select rtrim('Thangavel','l') from dual;
```

```
RTRIM('T  
-----  
Thangave
```

```
SQL> select instr('Thanagvel','a',1) from dual;
```

```
INSTR('THANAGVEL','A',1)  
-----  
3
```

```
SQL> select instr('Thanagvel','a',4) from dual;
```

```
INSTR('THANAGVEL','A',4)  
-----  
5
```

### DATE FUNCTIONS:

```
SQL> select sysdate from dual;
```

```
SYSDATE  
-----  
03-FEB-11
```

```
SQL> select add_months('03-FEB-1999',12) from dual;
```

```
ADD_MONTH  
-----  
03-FEB-00
```

```
SQL> select last_day('7-JUN-00') from dual;
```

```
LAST_DAY(  
-----  
30-JUN-00
```

```
SQL> select next_day('30-JUN-11','sunday') from dual;
```

```
NEXT_DAY(  
-----  
03-JUL-11
```

```
SQL> select least('30-MAR-11','31-AUG-11') from dual;
```

```
LEAST('30
-----
30-MAR-11
```

```
SQL> select greatest('30-MAR-11','31-AUG-11') from dual;
```

```
GREATEST(
-----
31-AUG-11
```

```
SQL> select months_between('3-FEB-11',sysdate) from dual;
```

```
MONTHS_BETWEEN('3-FEB-11',SYSDATE)
-----
0
```

### MISCELLANEOUS FUNCTIONS:

```
SQL> select dump('USER') from dual;
```

```
DUMP('USER')
-----
Typ=96 Len=4: 85,83,69,82
```

```
SQL> select user from dual;
```

```
USER
-----
EXAM70
```

```
SQL> select uid from dual;
```

```
UID
-----
193
```

### GROUP BY FUNCTIONS:

```
SQL> create table smarks (st_no number(4),marks number(3));
```

Table created.

```
SQL> insert into smarks values(&ST_NO,&MARKS);
Enter value for st_no: 112
Enter value for marks: 89
old 1: insert into smarks values(&ST_NO,&MARKS)
new 1: insert into smarks values(112,89)
```

1 row created.

```
SQL> insert into smarks values(&ST_NO,&MARKS);
Enter value for st_no: 113
Enter value for marks: 18
old 1: insert into smarks values(&ST_NO,&MARKS)
new 1: insert into smarks values(113,18)
```

1 row created.

```
SQL> insert into smarks values(&ST_NO,&MARKS);
Enter value for st_no: 114
Enter value for marks: 78
old 1: insert into smarks values(&ST_NO,&MARKS)
new 1: insert into smarks values(114,78)
```

1 row created.

```
SQL> SELECT * FROM SMARKS;
```

ST_NO	MARKS
112	89
113	18
114	78

```
SQL> select max(marks) from smarks;
```

```
MAX(MARKS)
-----
          89
```

```
SQL> select min(marks) from smarks;
```

```
MIN(MARKS)
-----
          18
```

```
SQL> select avg(marks) from smarks;
```

```
AVG(MARKS)
-----
 61.666667
```

```
SQL> select sum(marks) from smarks;
```

```
SUM(MARKS)
-----
      185
```

```
SQL> select count(marks) from smarks;
```

```
COUNT(MARKS)
-----
           3
```

```
SQL> select count(*) from smarks;
```

```
COUNT(*)
-----
      3
```

### ARITHMETIC OPERATORS:

```
SQL> select (4+5) from dual;
```

```
(4+5)
-----
      9
```

```
SQL> select (4-2) from dual;
```

```
(4-2)
-----
      2
```

```
SQL> select (4*5) from dual;
```

```
(4*5)
-----
     20
```

```
SQL> select (8/2) from dual;
```

```
      (8/2)
-----
         4
```

### COMPARISION OPERATORS:

```
SQL> select * from smarks where st_no=112;
```

```
      ST_NO      MARKS
-----
         112         89
```

```
SQL> select * from smarks where marks !=100;
```

```
      ST_NO      MARKS
-----
         112         89
         113         18
         114         78
```

```
SQL> select * from smarks where marks <> 100;
```

```
      ST_NO      MARKS
-----
         112         89
         113         18
         114         78
```

```
SQL> select * from smarks where marks >=78;
```

```
      ST_NO      MARKS
-----
         112         89
         114         78
```

```
SQL> select * from smarks where marks <=78;
```

```
      ST_NO      MARKS
-----
         113         18
         114         78
```



```
SQL> select * from smarks where marks<18;
```

no rows selected

```
SQL> select * from smarks where marks>18;
```

ST_NO	MARKS
112	89
114	78

```
SQL> select * from smarks where 112 in ST_NO;
```

ST_NO	MARKS
112	89

```
SQL> select * from smarks where 116 not in ST_NO;
```

ST_NO	MARKS
112	89
113	18
114	78

```
SQL> select * from smarks where 114 not in st_no;
```

ST_NO	MARKS
112	89
113	18

```
SQL> select * from smarks where 17 >any marks;
```

no rows selected

```
SQL> select * from smarks where 17 <any marks;
```

ST_NO	MARKS
112	89
113	18
114	78

```
SQL> select * from smarks where 17 >all marks;
```

```
no rows selected
```

```
SQL> select * from smarks where 17 <all marks;
```

ST_NO	MARKS
112	89
113	18
114	78

```
SQL> select * from smarks where 78 <all marks;
```

ST_NO	MARKS
112	89

```
SQL> select * from smarks where 18 <all marks;
```

ST_NO	MARKS
112	89
114	78

```
SQL> select * from smarks where 18 <any marks;
```

ST_NO	MARKS
112	89
114	78

```
SQL> select * from smarks where st_no like '%2';
```

ST_NO	MARKS
112	89

```
SQL> select * from smarks where st_no not like '%2';
```

ST_NO	MARKS
113	18
114	78

```
SQL> select * from smarks where marks between 1 and 70;
```

ST_NO	MARKS
113	18

```
SQL> insert into smarks values(&ST_NO,&MARKS);
```

```
Enter value for st_no: 116
```

```
Enter value for marks: NULL
```

```
old 1: insert into smarks values(&ST_NO,&MARKS)
```

```
new 1: insert into smarks values(116,NULL)
```

```
1 row created.
```

```
SQL> select * from smarks where marks is null;
```

ST_NO	MARKS
116	

```
SQL> select * from smarks where marks is NOT NULL;
```

ST_NO	MARKS
112	89
113	18
114	78

```
SQL> select * from smarks where exists(select marks from smarks);
```

ST_NO	MARKS
112	89
113	18
114	78
116	

```
SQL> select * from smarks where not exists(select marks from smarks);
```

```
no rows selected
```

**LOGICAL OPERATORS:**

```
SQL> select * from smarks where (marks>17 and marks<78);
```

ST_NO	MARKS
113	18

```
SQL> select * from smarks where (marks=17 or marks=18);
```

ST_NO	MARKS
113	18

```
SQL> select * from smarks where (not marks=90);
```

ST_NO	MARKS
112	89
113	18
114	78

**SET OPERATORS:**

```
SQL> select * from emp;
```

EMP_ID
1
2
3
4
5
6

6 rows selected.

```
SQL> select * from emp1;
```

EMP_ID
1
3
5
7
9
10

6 rows selected.

```
SQL> (select emp_id from emp) union (select emp_id from emp1);
```

```
EMP_ID
-----
      1
      2
      3
      4
      5
      6
      7
      9
     10
```

9 rows selected.

```
SQL> (select emp_id from emp) union all (select emp_id from emp1);
```

```
EMP_ID
-----
      1
      2
      3
      4
      5
      6
      1
      3
      5
      7
      9
     10
```

12 rows selected.

```
SQL> (select emp_id from emp) intersect (select emp_id from emp1);
```

```
EMP_ID
-----
      1
      3
      5
```

```
SQL> (select emp_id from emp) minus (select emp_id from emp1);
```

```
EMP_ID
-----
      2
      4
      6
```

=====  
Ex.No. : 2

Implement the concept of Normalization  
=====

### FIRST NORMAL FORMS

```
SQL> CREATE TABLE EMPLOYEES (ENO NUMBER (5), ENAME VARCHAR (15),  
EADD VARCHAR (15), SAL NUMBER (10));
```

TABLE CREATED.

```
SQL> CREATE TABLE EN1 AS SELECT ENO, ENAME, SAL FROM EMPLOYEES;
```

TABLE CREATED.

```
SQL> ALTER TABLE EN1 ADD PRIMARY KEY (ENO);
```

TABLE ALTERED.

```
SQL> CREATE TABLE EN2 AS SELECT ENO, EADD FROM EMPLOYEES;
```

TABLE CREATED.

```
SQL> ALTER TABLE EN2 ADD FOREIGN KEY (ENO) REFERENCES EN1 (ENO);
```

TABLE ALTERED.

**Employee**

<b>Eno</b>	<b>Ename</b>	<b>Eadd</b>	<b>Sal</b>
------------	--------------	-------------	------------

1 NF ↓

<b>Eno</b>	<b>Ename</b>	<b>sal</b>
------------	--------------	------------

**emp 1**

<b>Eno</b>	<b>eadd</b>
------------	-------------

**emp2**

**SECOND NORMAL FORM**

```
SQL> CREATE TABLE EMPPROJECT(ENO NUMBER(5),ENAME
VARCHAR(10),PNO NUMBER(5),PNAME VARCHAR(10),HOURS NUMBER(5));
```

TABLE CREATED.

```
SQL> CREATE TABLE EP1 AS SELECT ENO, ENAME FROM EMPPROJECT;
```

TABLE CREATED.

```
SQL> ALTER TABLE EP1 ADD PRIMARY KEY (ENO);
```

TABLE ALTERED.

```
SQL> CREATE TABLE EP2 AS SELECT PNO, PNAME FROM EMPPROJECT;
```

TABLE CREATED.

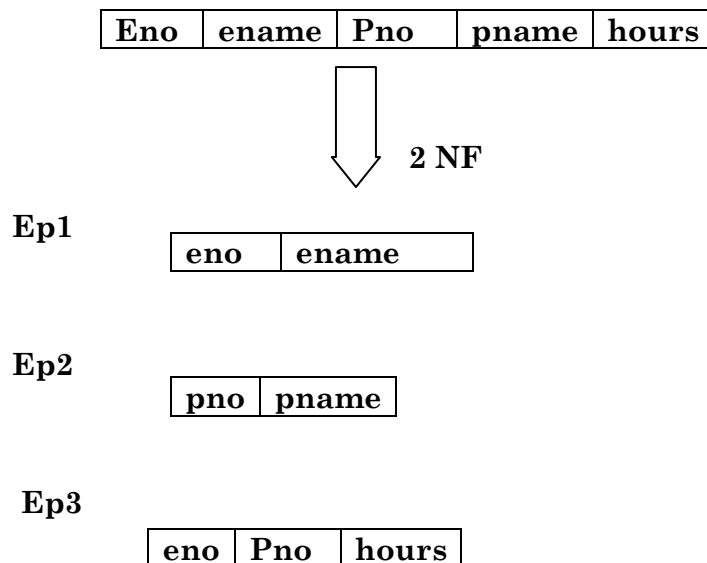
```
SQL> ALTER TABLE EP2 ADD PRIMARY KEY (PNO);
```

TABLE ALTERED.

SQL> CREATE TABLE EP3 AS SELECT ENO, PNO, HOURS FROM EMPPROJECT;  
TABLE CREATED.

SQL> ALTER TABLE EP3 ADD CONSTRAINT E3 PRIMARY KEY (ENO);  
TABLE ALTERED.

SQL> ALTER TABLE EP3 ADD CONSTRAINT E4 UNIQUE (PNO);  
TABLE ALTERED.



### THIRD NORMAL FORMS

SQL> CREATE TABLE EMPDEPT(ENO NUMBER(5),ENAME VARCHAR(10),SAL  
NUMBER(10),DNO NUMBER(5),DNAME VARCHAR(10));  
TABLE CREATED.



```
SQL> CREATE TABLE ED1 AS SELECT ENO, ENAME, SAL, DNO FROM
EMPDEPT;
```

TABLE CREATED.

```
SQL> ALTER TABLE ED1 ADD PRIMARY KEY (ENO);
```

TABLE ALTERED.

```
SQL> CREATE TABLE ED2 AS SELECT DNO, DNAME FROM EMPDEPT;
```

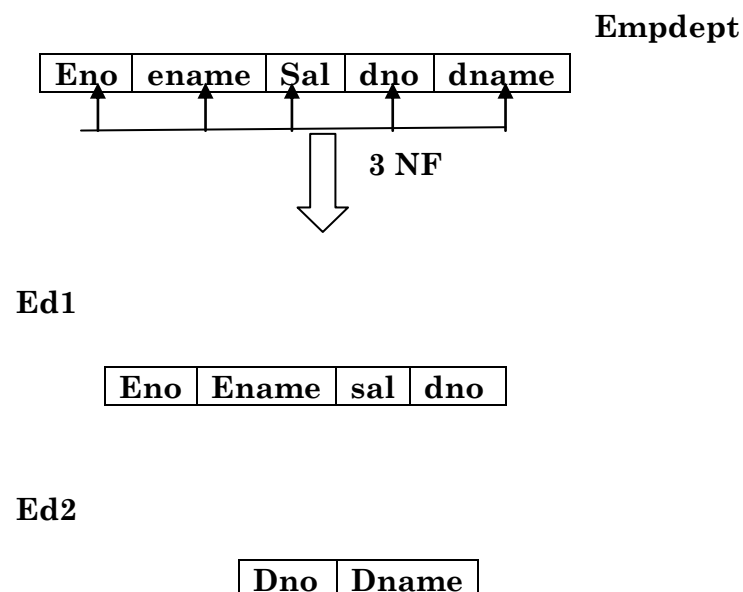
TABLE CREATED.

```
SQL> ALTER TABLE ED2 ADD PRIMARY KEY (DNO);
```

TABLE ALTERED.

```
SQL> ALTER TABLE ED1 ADD FOREIGN KEY (DNO) REFERENCES ED2(DNO);
```

TABLE ALTERED.



=====  
**Ex.No. : 3            Implement the inventory control system with a reorder level.**  
=====

```
SQL> create table BookStock(Bno number(3),Bname varchar2(15),Bauthor  
varchar2(15),CopAvail number(6),Ucost number(6)) ;
```

Table created.

```
SQL> desc BookStock;
```

Name	Null?	Type
-----	-----	-----
BNO		NUMBER(3)
BNAME		VARCHAR2(15)
BAUTHOR		VARCHAR2(15)
COPAVAL		NUMBER(6)
UCOST		NUMBER(6)

```
SQL> create table invent(Bno number(3),Bname varchar2(15),Bauthor varchar2(15),  
Copies number(6), Tamt number(6)) ;
```

Table created.

```
SQL> ed Insert3
```

```
SQL> get Insert3
```

```
1 declare  
2 begin  
3 insert into BookStock values  
( '&BookNo','&Bname','&Bauthor','&copies','&UnitCost');  
4* end;
```

SQL> /

Enter value for bookno: 101

Enter value for bname: C++

Enter value for bauthor: Suresh

Enter value for copies: 7

Enter value for unitcost: 100

old 3: insert into BookStock

values('&BookNo','&Bname','&Bauthor','&copies','&UnitCost');

new 3: insert into BookStock values('101','C++','Suresh','7','100');

PL/SQL procedure successfully completed.

SQL> /

Enter value for bookno: 102

Enter value for bname: JAVA

Enter value for bauthor: Gold

Enter value for copies: 10

Enter value for unitcost: 150

old 3: insert into BookStock

values('&BookNo','&Bname','&Bauthor','&copies','&UnitCost');

new 3: insert into BookStock values('102','JAVA','Gold','10','150');

PL/SQL procedure successfully completed.

SQL> /

Enter value for bookno: 103

Enter value for bname: WBT

Enter value for bauthor: Chellamal

Enter value for copies: 12

Enter value for unitcost: 500

old 3: insert into BookStock

values('&BookNo','&Bname','&Bauthor','&copies','&UnitCost');

new 3: insert into BookStock values('103','WBT','Chellamal','12','500');

PL/SQL procedure successfully completed.

```
SQL> select * from BookStock;
```

BNO	BNAME	BAUTHOR	COPAVAIL	UCOST
101	C++	Suresh	7	100
102	JAVA	Gold	10	150
103	WBT	Chellamal	12	500

```
SQL> SET SERVEROUTPUT ON;
```

```
SQL> ed Proc2
```

```
SQL> get Proc2
```

```
1 declare
2 b varchar2(15);
3 n number(3);
4 l number(3);
5 t number(6);
6 a number(6);
7 Brecord BookStock%rowtype;
8 cursor c is select * from BookStock;
9 begin
10 l:=0;
11 open c;
12 loop
13 fetch c into Brecord;
14 exit when c%notfound;
15 b:='&BookName';
16 if(Brecord.Bname=b)then
17 l:=1;
18 n:=&No_of_copies_reqd;
19 if(Brecord.CopAvail>n)then
20 t:=Brecord.CopAvail-n;
21 a:=Brecord.Ucost*n;
```

```
22 update BookStock set CopAvail=t where Bname=b;
23 insert into invent values(Brecord.Bno,Brecord.Bname,
24                          Brecord.Bauthor,n,a);
25 else
26 dbms_output.put_line('Books not available');
27 end if;
28 end if;
29 end loop;
30 close c;
31 if l=0 then
32 dbms_output.put_line('Invalid Book name');
33 end if;
34* end;
```

SQL> /

Enter value for bookname: C++

old 15: b:='&BookName';

new 15: b:='C++';

Enter value for no\_of\_copies\_reqd: 2

old 18: n:='&No\_of\_copies\_reqd';

new 18: n:=2;

PL/SQL procedure successfully completed.

SQL> /

Enter value for bookname: JAVA

old 15: b:='&BookName';

new 15: b:='JAVA';

Enter value for no\_of\_copies\_reqd: 3

old 18: n:='&No\_of\_copies\_reqd';

new 18: n:=3;

PL/SQL procedure successfully completed.

```
SQL> select * from BookStock;
```

BNO	BNAME	BAUTHOR	COPAVAL	UCOST
101	C++	Suresh	5	100
102	JAVA	Gold	7	150
103	WBT	Chellama1	12	500

```
SQL> Select * from invent;
```

BNO	BNAME	BAUTHOR	COPIES	TAMT
101	C++	Suresh	2	200
102	JAVA	Gold	3	450

```
SQL> select Bno,Bname from BookStock where copavail<8;
```

BNO	BNAME
101	C++
102	JAVA

=====  
**Ex.No.: 4    Develop a package for a bank to maintain its customer details**  
=====

```
SQL> create table bankmaster( accno number(15), accname varchar2(20), address
varchar2(20), Balance number(10));
```

Table created.

```
SQL> desc bankmaster;
```

Name	Null?	Type
-----	-----	-----
ACCNO		NUMBER(15)
ACCNAME		VARCHAR2(20)
ADDRESS		VARCHAR2(20)
BALANCE		NUMBER(10)

```
SQL> create table trans(accno number(15), accname varchar2(20), transdate date,
transtype varchar2(1), amt number(10));
```

Table created.

```
SQL> desc trans;
```

Name	Null?	Type
-----	-----	-----
ACCNO		NUMBER(15)
ACCNAME		VARCHAR2(20)
TRANSDATE		DATE
TRANSTYPE		VARCHAR2(1)
AMT		NUMBER(10)

```
SQL> set serveroutput on;
```

```
SQL> ed Proc3
```

```
SQL> get proc3
```

```
1 create or replace procedure custadd(x1 number, x2 varchar, x3 varchar, x4 number)
2 acno number;
3 acname varchar2(20);
4 add varchar2(20);
5 bal number;
6 begin
7 acno:= x1;
8 acname:=x2;
9 add:=x3;
10 bal:=x4;
11 insert into bankmaster values(acno,acname,add,bal);
12 dbms_output.put_line('Record Inserted');
13* end;
SQL> /
```

Procedure created.

```
SQL> exec custadd(8080,'GOLD','Trichy',5000);
Record Inserted
```

PL/SQL procedure successfully completed.

```
SQL> exec custadd(8081,'SURESH','Salem',10000);
Record Inserted
```

PL/SQL procedure successfully completed.

```
SQL> exec custadd(8082,'PROX','Erode',7000);
Record Inserted
```

PL/SQL procedure successfully completed.



```
SQL> select * from bankmaster;
```

ACCNO	ACCNAME	ADDRESS	BALANCE
8080	GOLD	Trichy	5000
8081	SURESH	Salem	10000
8082	PROX	Erode	7000

```
SQL> ed Proc4
```

```
SQL> /
```

ACCNO	ACCNAME	ADDRESS	BALANCE
8080	GOLD	Trichy	5000
8081	SURESH	Salem	10000
8082	PROX	Erode	7000

```
SQL> get Proc4
```

```
1 create or replace procedure custdelete( x number) as
2 acno number(10);
3 begin
4 acno:=x;
5 delete from bankmaster where accno = acno;
6 delete from bankmaster where accno = acno;
7 dbms_output.put_line('Record Deleted');
8* end;
```

```
SQL> /
```

Procedure created.

```
SQL> exec custdelete(8080);
```

Record Deleted

PL/SQL procedure successfully completed.

```
SQL> ed Proc5
```

```
SQL> get Proc5
```

```
1 create or replace procedure custtrans( x1 number, x2 varchar2, x3 number) as
2 acno number(15);
3 actype varchar2(20);
4 bal number(10);
5 taccno number(15);
6 taccname varchar2(20);
7 tbalance number(10);
8 tdate date;
9 begin
10 acno:=x1;
11 actype:=x2;
12 bal:=x3;
13 select accno,accname,balance into taccno,taccname,tbalance from bankmaster
where accno = acno;
14 if SQL%FOUND then
15 dbms_output.put_line('Record Found');
16 tdate:=sysdate;
17 if actype = 'D' then
18 insert into trans values(taccno,taccname,tdate,actype,bal);
19 update bankmaster set balance = tbalance + bal where accno=acno;
20 else
21 insert into trans values(taccno,taccname,tdate,actype,bal);
22 update bankmaster set balance = tbalance - bal where accno=acno;
23 end if;
24 else
25 dbms_output.put_line('No Record Not Found');
26 end if;
27* end;
```

SQL> /

Procedure created.

SQL> exec custtrans(8081,'D',2000);

Record Found

PL/SQL procedure successfully completed.

SQL> select \* from trans;

ACCNO	ACCNAME	TRANSDATE	T	AMT
8081	SURESH	31-MAR-11	D	2000

SQL> exec custtrans(8082,'W',2000);

Record Found

PL/SQL procedure successfully completed.

SQL> select \* from trans;

ACCNO	ACCNAME	TRANSDATE	T	AMT
8081	SURESH	31-MAR-11	D	2000
8082	PROX	31-MAR-11	W	2000

SQL> select \* from bankmaster;

ACCNO	ACCNAME	ADDRESS	BALANCE
8081	SURESH	Salem	12000
8082	PROX	Erode	5000

=====  
Ex.No. : 5            **Develop a package for the payroll of a company.**  
=====

SQL> ed table

SQL> get table

line 1 truncated.

1\* Create Table employeedb( ID Number(3) , Name Varchar2(10), Category  
Varchar2(1), BasicSalary

SQL> /

Table created.

SQL> desc employeedb

Name	Null?	Type
-----	-----	-----
ID		NUMBER(3)
NAME		VARCHAR2(10)
CATEGORY		VARCHAR2(1)
BASICSALARY		NUMBER(8,2)
HRA		NUMBER(2)
DA		NUMBER(2)
EPF		NUMBER(5)
LIC		NUMBER(5)

SQL> ed Insert1

SQL> GET iNsert1

line 1 truncated.

1\* Insert Into employeedb Values( 101, 'GOLD','T', 8000, 10, 15, 1000 , 500 )

SQL> /

1 row created.

SQL> ed Insert2

SQL> get Insert2

line 1 truncated.

1\* Insert Into employeedb Values( 102, 'Suresh','N',10000, 10, 15, 800 , 600 )

SQL> /

1 row created.

SQL> select \* from employeedb;

ID	NAME	C	BASICSALARY	HRA	DA	EPF	LIC
101	GOLD	T	8000	10	15	1000	500
102	Suresh	N	10000	10	15	800	600

SQL> ed table2;

SQL> get table2;

line 1 truncated.

1\* Create Table PayMent( ID Number(3), Name Varchar2(10), GrossSalary Number(10,2), NetSalary Numb

SQL> /

Table created.

SQL> desc PayMent

Name	Null?	Type
ID		NUMBER(3)
NAME		VARCHAR2(10)
GROSSSALARY		NUMBER(10,2)
NETSALARY		NUMBER(10,2)

```
SQL> Select * from PayMent;  
no rows selected
```

```
SQL> ed Proc1
```

```
SQL> get Proc1;
```

```
1 Create or Replace Procedure PayRoll( X Number) As  
2 PName Varchar2(10);  
3 PID Number(3);  
4 PHRA Number(2) := 0;  
5 PDA Number(2) := 0;  
6 PEPF Number(5) := 0;  
7 PLIC Number(5) := 0;  
8 PBasicSalary Number(8,2) :=0;  
9 PGrossSal Number(10,2) := 0;  
10 PNetSal Number(10,2) := 0;  
11 Begin  
12 PID := X;  
13 Select Name, BasicSalary, HRA, DA, EPF, LIC  
14 Into PName, PBasicSalary, PHRA, PDA, PEPF, PLIC  
15 from employeedb Where ID = PID;  
16 PGrossSal := PBasicSalary + (PBasicSalary * (PHRA / 100) ) +  
17 (PBasicSalary *(PDA / 100) );  
18 PNetSal := PGrossSal - ( PEPF + PLIC );  
19 Insert Into payment Values( PID, PName, PGrossSal, PNetSal );  
20* End;  
SQL> /
```

Procedure created.

```
SQL> Select * from PayMent;  
no rows selected
```

SQL> EXEC PayRoll(101);

PL/SQL procedure successfully completed.

SQL> EXEC PayRoll(102);

PL/SQL procedure successfully completed.

SQL> Select \* from PayMent;

ID	NAME	GROSSSALARY	NETSALARY
101	GOLD	10000	8500
102	suresh	12500	11100

=====

**Ex.No.: 6 Designing a web site using HTML– DHTML and Client side scripting.**

=====

//----*home.html*----

```

<html>
<head> <title> My India </title> </head>
<body bgcolor="Pink">

<hr NOSHADE SIZE=10/>
<table>
<tr>
<td>
<h4> <center> <marquee WIDTH=100% BEHAVIOR=ALTERNATE BGColor=yellow>
<h1> MINISTRY OF TOURISM </h1> </marquee> </center> <br/> <center>
CITIZEN'S/ CLIENT'S CHARTER </center> <br/>
<ol>
<li>Vision</li>
Achieve a superior quality of life for Citizens of India through tourism, which would
provide a unique opportunity for physical invigoration,<br/> mental rejuvenation,
cultural enrichment and spiritual elevation.
<li>Mission</li>
<ul>
<li>Positioning and maintaining tourism development as a national priority
activity</li>
<li>Enhancing and maintaining the competitiveness of India as a tourism
destination</li>
<li>Improving India's existing tourism products and expanding these to meet new
market requirements.</li>
<li>Promoting sustainable tourism</li>

```



```

</li>Creation of world class infrastructure.</li>
</li>ugmenting human resource base in hospitality and tourism sector.</li> </h4>
<br/>
<center><a href="Map.html"> India Outline Map </a></center>
</td> </tr>
</table>
</body>
</html>

```

#### *//-----map.html-----*

```

<html>
<head> <title> My Outline India </title> </head>
<body bgcolor="sky blue">
<marquee> <h1> India Outline Map </h1> </marquee>
<table>
<tr>
<td>

<map name="html">
<area shape="circle" coords="220,234,10" href="3.html" alt="delhi">
<area shape="circle" coords="118,449,20" href="1.html" alt="mumbai"> <area
shape="circle" coords="284,602,20" href="2.html" alt="chennai"> <area
shape="circle" coords="114,424,10" href="4.html" alt="goa">
</map>
</td>
<td>
 <br/>
 <br/>

</body>
</html>

```

```
//----1.html----  
<html>  
<head>  
<title> Mumbai</title>  
</head>  
<body bgcolor="Sky Blue">  
<hr>  
<marqueestyle="font-size:40;font-family:"verdana""> <b>MUMBAI<b/></marquee>  
<hr>  
<table border="0" width="100%">  
<tr>  
<td>  
<ul>  
<li>Mumbai,formerly Bombay,is the capital of the Indian state of Maharashtra.</li>  
<li>The city proper is the most populous city in India and the second most populous in  
the world, with approximately 14 million inhabitants.</li>  
<li>Along with the neighbouring suburbs of Navi Mumbai and Thane, it forms the  
world's 4th largest urban agglomeration, with around 19 million people.</li>  
<li>Mumbai lies on the west coast of India and has a deep natural harbour.</li>  
<li>Mumbai's port handles about 60% of India's maritime cargo.</li>  
<li>As of 2008, Mumbai has been ranked as an Alpha world city.</li>  
<li>The seven islands that came to constitute Bombay were home to communities of  
fishing colonies.</li>  
<li>For centuries, the islands came under the control of successive kingdoms and  
indigenous empires before being ceded to Portuguese settlers and subsequently to the  
British East India Company.</li>  
<li>During the mid-18th century, Bombay emerged as a significant trading town.</li>  
<li>Economic and educational development characterised the city during the 19th  
century.</li>  
<li>It became a strong base for the Indian independence movement during the early  
20th century and was the epicentre of the Rowlatt Satyagraha and the Royal Indian
```

Navy Mutiny. When India became independent in 1947, the city was incorporated into Bombay State.</li>

<li>In 1960, following the Samyukta Maharashtra movement, a new state of Maharashtra was created with Bombay as the capital.</li>

<li>It was renamed Mumbai in 1996.</li>

</ul>

</p>

</td>

<td>



</td></tr>

</table>

<marquee>

<h1 style="font-family:'arial' font-size:20px" align="center">

<h1>THANKYOU!!!!!!</h1></h1></marquee>

</body>

</html>

//----2.html---

<html>

<head>

<title>About Chennai</title>

<script type="text/javascript">

function bgChange(bg)

{

document.body.style.background=bg;

}

</script>

</head>

<body bgcolor="violet">

<b>Mouse over the squares and the background color will change!</b>

```
<hr>
<marquee><FONT SIZE="10">CHENNAI</FONT></marquee>
<hr>
<table width="1000" height="100">
<tr>
<td>
<ul>
<li>Chennai is the fifth largest city in India and the capital city of the Indian state of
Tamil Nadu</li>
<li>Located on the Coromandel Coast of the Bay of Bengal, Chennai city had a
population of 4.2 million in the 2001 census within its municipal corporation.</li>
<li>The urban agglomeration of metropolitan Chennai has an estimated population
over 8 million, making it one of the largest urban agglomerations in India.</li>
<li>The city was established in the 17th century by the British, who developed it into a
major urban centre and naval base. </li>
<li>By the 20th century, it had become an important administrative centre, as the
capital of the Madras Presidency.</li>
<li>Chennai's economy has a broad industrial base in the automobile, technology,
hardware manufacturing, and healthcare industries.</li>
<li>The city is India's second largest exporter of software, information technology (IT)
and information-technology-enabled services (ITES).</li>
<li>A major chunk of India's automobile manufacturing industry is based in and
around the city</li>
<li>Chennai Zone contributes 39 per cent of the State's GDP.</li>
<li>Chennai accounts for 60 per cent of the country's automotive exports and is
sometimes referred to as the Detroit of India.</li>
</ul>
</td>
<td>


```

```
</td>
</tr>
</table>
<table width="300" height="100">
<tr>
  <td onmouseover="bgChange('red')"
    onmouseout="bgChange('transparent')"
    bgcolor="red">
</td>
  <td onmouseover="bgChange('blue')"
    onmouseout="bgChange('transparent')"
    bgcolor="blue">
</td>
  <td onmouseover="bgChange('green')"
    onmouseout="bgChange('transparent')"
    bgcolor="green">
</td>
  <td onmouseover="bgChange('yellow')"
    onmouseout="bgChange('transparent')"
    bgcolor="yellow">
</td>
  <td onmouseover="bgChange('pink')"
    onmouseout="bgChange('transparent')"
    bgcolor="pink">
</td>
</tr>
</table>
<marquee><h1><h1>THANKYOU!!!!!!</h1></h1></marquee>
</body>
</html>
```

```
//----3.html----
```

```
<html>
```

```
<head>
```

```
<title> delhi</title>
```

```
<link rel="stylesheet" type="text/css" href="3.css">
```

```
</head>
```

```
<body bgcolor="pink">
```

```
<hr>
```

```
<marquee><FONT SIZE="10">Delhi.....</FONT></marquee>
```

```
<hr>
```

```
<table border="0" width="100%">
```

```
<tr>
```

```
<td>
```

```
<ul>
```

```
<li>Delhi, known locally as Dilli , and also by the official name National Capital Territory of Delhi (NCT), is the second-largest metropolis in India.</li>
```

```
<li>With over 15.9 million residents, it is the eighth largest metropolis in the world by population.</li>
```

```
<li>The name Delhi is often also used to include some urban areas near the NCT, as well as to refer to New Delhi, the capital of India, which lies within the NCT. </li>
```

```
<li>The NCT is a federally administered union territory.</li>
```

```
<li>Located on the banks of the River Yamuna, Delhi has been continuously inhabited since at least the 6th century BC.After the rise of the Delhi Sultanate, Delhi emerged as a major political, cultural and commercial city along the trade routes between northwest India and the Indo-Gangetic plains.</li>
```

```
<li>It is the site of many ancient and medieval monuments, archaeological sites and remains. </li>
```

```
<li>In 1639, Mughal emperor Shahjahan built a new walled city in Delhi which served as the capital of the Mughal Empire from 1649 to 1857.</li>
```

```
<li>After the British East India Company gained control of much of India during the 18th and 19th centuries, Calcutta became the capital both under Company rule and
```

under the British Raj, until George V announced in 1911 that it was to move back to Delhi.</li>

<li>A new capital city, New Delhi, was built to the south of the old city during the 1920s.[9] When India gained independence from British rule in 1947, New Delhi was declared its capital and seat of government. </li>

<li>As such, New Delhi houses important offices of the federal government, including the Parliament of India.</li>

</ul>

</p></td>

<td>



</td></tr>

</table>

<marquee><h1><h1>THANKYOU!!!!!!</h1></h1></marquee>

</body>

</html>

//---4.html---

<html>

<head>

<title> goa</title>

<style type="text/css">

li {font-family:"arial" font-size:20px}

h1 {font-size:"40pt" font-family:"verdana"}

</style>

</head>

<body bgcolor="gold">

<hr>

<marquee><FONT SIZE="10">Goa.....</FONT></marquee>

<hr>

<table border="0" width="100%">

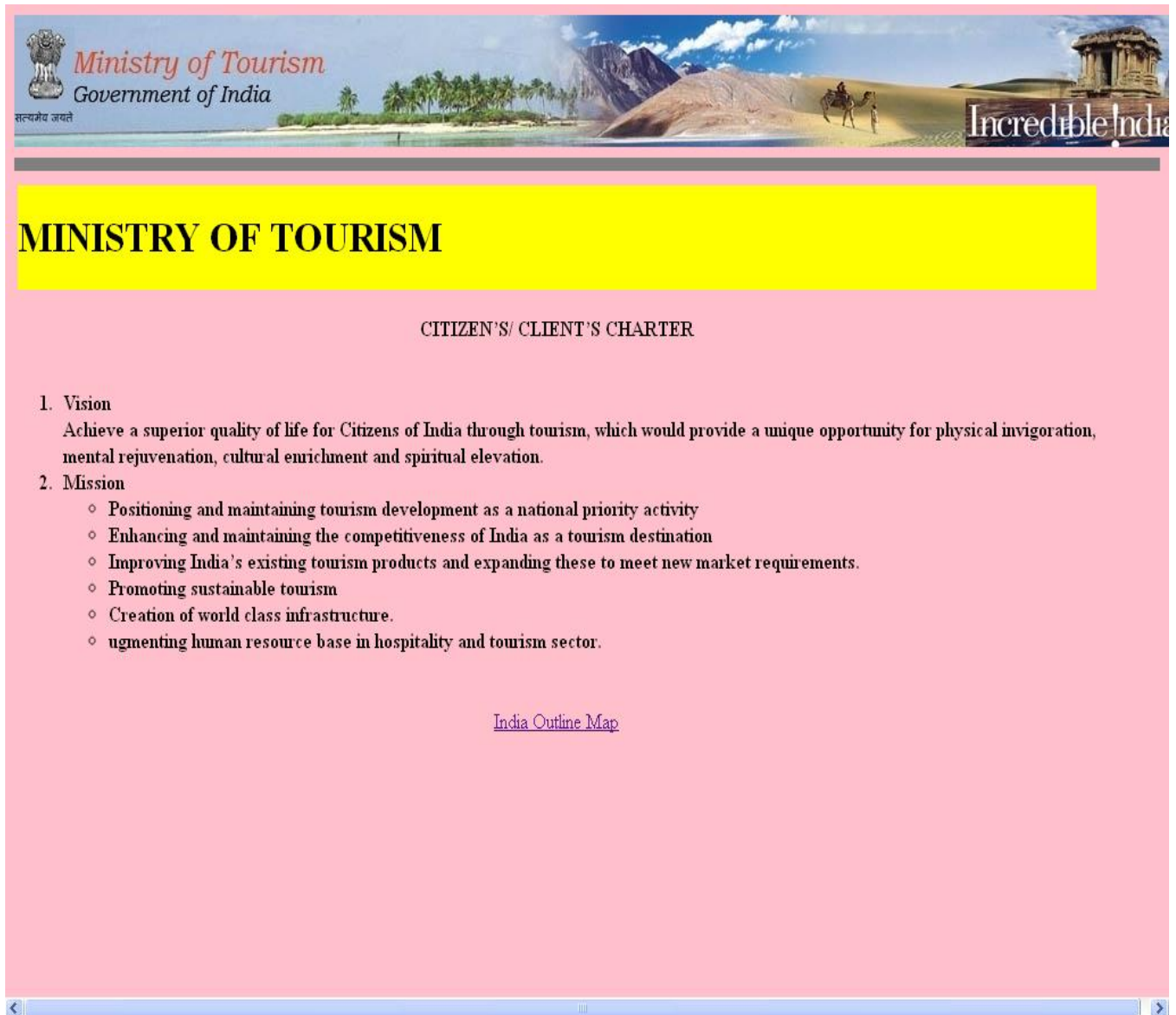
```
<tr><td>
<ul>
<li>Goa is India's smallest state in terms of area and the fourth smallest in terms of
population. </li>
<li>Located on the west coast of India in the region known as the Konkan, it is bounded
by the state of Maharashtra to the north, and by Karnataka to the east and south,
while the Arabian Sea forms its western coast.</li>
<li>Panaji is the state's capital. Vasco da Gama is the largest city. </li>
<li>The historic city of Margao still exhibits the influence of Portuguese culture. </li>
<li>The Portuguese first landed in Goa as merchants, in the early 16th century, and
conquered it soon thereafter. </li>
<li>The Portuguese overseas territory existed for about 450 years, until it was annexed
by India in 1961.</li>
</ul>
</p>
</td>
<td>

</td></tr>
</table>
<marquee><h1><h1>THANKYOU!!!!!!!!</h1></h1></marquee>
</body></html>
```

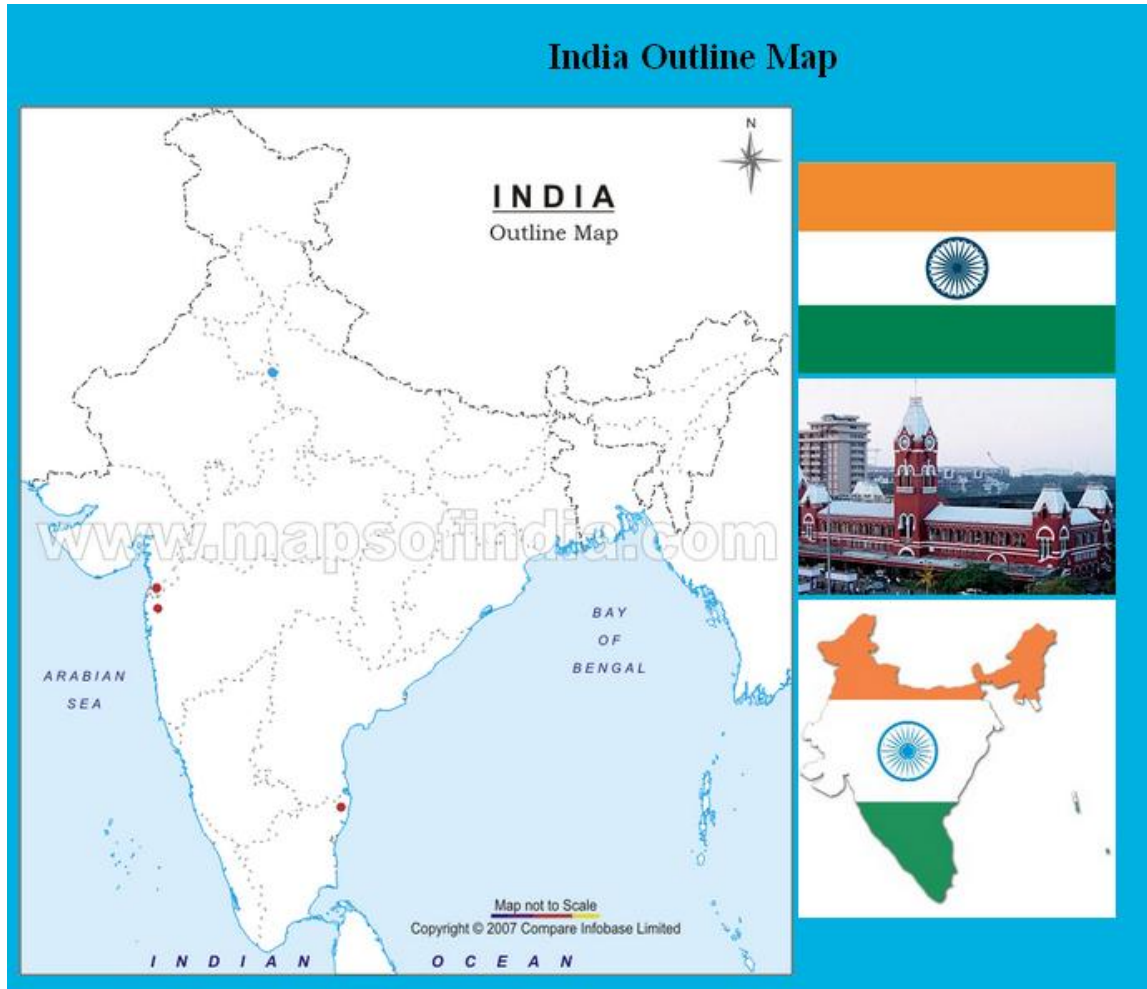


**Output:**

//----*home.html*----



//----map.html-----



//-----1.html-----

Mouse over the squares and the background color will change!

## CHENNAI

- Chennai is the fifth largest city in India and the capital city of the Indian state of Tamil Nadu
- Located on the Coromandel Coast of the Bay of Bengal, Chennai city had a population of 4.2 million in the 2001 census within its municipal corporation.
- The urban agglomeration of metropolitan Chennai has an estimated population over 8 million, making it one of the largest urban agglomerations in India.
- The city was established in the 17th century by the British, who developed it into a major urban centre and naval base.
- By the 20th century, it had become an important administrative centre, as the capital of the Madras Presidency.
- Chennai's economy has a broad industrial base in the automobile, technology, hardware manufacturing, and healthcare industries.
- The city is India's second largest exporter of software, information technology (IT) and information-technology-enabled services (ITES).
- A major chunk of India's automobile manufacturing industry is based in and around the city
- Chennai Zone contributes 39 per cent of the State's GDP.
- Chennai accounts for 60 per cent of the country's automotive exports and is sometimes referred to as the Detroit of India.



**THANKYOU!!!!!!!**

//-----2.html-----

## MUMBAI

- Mumbai, formerly Bombay, is the capital of the Indian state of Maharashtra.
- The city proper is the most populous city in India and the second most populous in the world, with approximately 14 million inhabitants.
- Along with the neighbouring suburbs of Navi Mumbai and Thane, it forms the world's 4th largest urban agglomeration, with around 19 million people.
- Mumbai lies on the west coast of India and has a deep natural harbour.
- Mumbai's port handles about 60% of India's maritime cargo.
- As of 2008, Mumbai has been ranked as an Alpha world city.
- The seven islands that came to constitute Bombay were home to communities of fishing colonies.
- For centuries, the islands came under the control of successive kingdoms and indigenous empires before being ceded to Portuguese settlers and subsequently to the British East India Company.
- During the mid-18th century, Bombay emerged as a significant trading town.
- Economic and educational development characterised the city during the 19th century.
- It became a strong base for the Indian independence movement during the early 20th century and was the epicentre of the Rowlatt Satyagraha and the Royal Indian Navy Mutiny. When India became independent in 1947, the city was incorporated into Bombay State.
- In 1960, following the Samyukta Maharashtra movement, a new state of Maharashtra was created with Bombay as the capital.
- It was renamed Mumbai in 1996.



**THANKYOU!!!!!!**

//-----3.html-----

## Goa.....

- Goa is India's smallest state in terms of area and the fourth smallest in terms of population.
- Located on the west coast of India in the region known as the Konkan, it is bounded by the state of Maharashtra to the north, and by Karnataka to the east and south, while the Arabian Sea forms its western coast.
- Panaji is the state's capital. Vasco da Gama is the largest city.
- The historic city of Margao still exhibits the influence of Portuguese culture.
- The Portuguese first landed in Goa as merchants, in the early 16th century, and conquered it soon thereafter.
- The Portuguese overseas territory existed for about 450 years, until it was annexed by India in 1961.

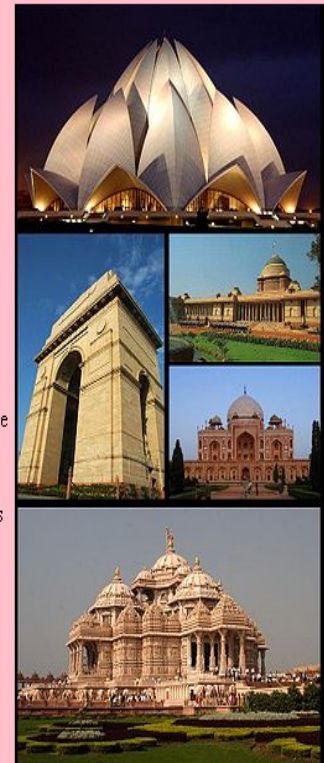


**THANKYOU!!!!!!!**

//----4.html-----

## Delhi.....

- Delhi, known locally as Dilli , and also by the official name National Capital Territory of Delhi (NCT), is the second-largest metropolis in India.
- With over 15.9 million residents, it is the eighth largest metropolis in the world by population.
- The name Delhi is often also used to include some urban areas near the NCT, as well as to refer to New Delhi, the capital of India, which lies within the NCT.
- The NCT is a federally administered union territory.
- Located on the banks of the River Yamuna, Delhi has been continuously inhabited since at least the 6th century BC. After the rise of the Delhi Sultanate, Delhi emerged as a major political, cultural and commercial city along the trade routes between northwest India and the Indo-Gangetic plains.
- It is the site of many ancient and medieval monuments, archaeological sites and remains.
- In 1639, Mughal emperor Shahjahan built a new walled city in Delhi which served as the capital of the Mughal Empire from 1649 to 1857.
- After the British East India Company gained control of much of India during the 18th and 19th centuries, Calcutta became the capital both under Company rule and under the British Raj, until George V announced in 1911 that it was to move back to Delhi.
- A new capital city, New Delhi, was built to the south of the old city during the 1920s. [9] When India gained independence from British rule in 1947, New Delhi was declared its capital and seat of government.
- As such, New Delhi houses important offices of the federal government, including the Parliament of India.



**THANKYOU!!!!!!**

=====

Ex.No.: 7                    **Program in Java for getting time and data information**  
**from the server using TCP/UDP**

=====

### GETTING TIME AND DATA INFORMATION FROM THE SERVER USING TCP

#### *//DateServer.java*

```
import java.net.*;
import java.io.*;
import java.util.*;
public class DateServer
{
    public static void main(String ars[] throws UnknownHostException,IOException
    {
        ServerSocket ss=new ServerSocket(2000);
        Socket s=ss.accept();
        OutputStream out = s.getOutputStream();
        PrintStream PS=new PrintStream(out);
        Date d=new Date();
        PS.println(d);
    }
}
```

#### *// DateClient.java*

```
import java.net.*;
import java.io.*;
public class DateClient
{
    public static void main(String ars[] throws UnknownHostException,IOException
    {
```

```
Socket s=new Socket(InetAddress.getLocalHost(),2000);
InputStream in = s.getInputStream();
DataInputStream din=new DataInputStream(in);
try
{
    String str=din.readLine();
    System.out.println("Today's Date and current Time in server is: ");
    System.out.println(str);
}
catch(Exception e){}
}
```

**Output:**

```
D:\WBT LAB>javac DateServer.java
```

```
D:\WBT LAB>java DateServer
```

```
D:\WBT LAB>javac DateClient.java
```

```
Note: DateClient.java uses or overrides a deprecated API.
```

```
Note: Recompile with -Xlint:deprecation for details.
```

```
D:\WBT LAB>java DateClient
```

```
Today's Date and current Time in server is:
```

```
Thu Mar 03 01:04:26 PST 2011
```



## GETTING TIME AND DATA INFORMATION FROM THE SERVER USING UDP

*//client*

```
import java.io.*;
import java.net.*;
public class udpclient
{
public void active()throws IOException
{
DatagramSocket ds;
DatagramPacket op;
DatagramPacket ip;
InetAddress sadd;
byte[] msg=new byte[80];
String recv;
ds=new DatagramSocket();
sadd=InetAddress.getLocalHost();
op=new DatagramPacket(msg,1,sadd,8000);
ds.send(op);
ip=new DatagramPacket(msg,msg.length);
ds.receive(ip);
recv=new String(ip.getData(),0,ip.getLength());
System.out.println("\nConnection established\n");
System.out.println("\nReceived message from server:Date and Time \n");
System.out.println(recv);
System.out.println();
ds.close();
}
```

```
public static void main(String abc[])
{
udpclient udpclient=new udpclient();
try
{
udpclient.active();
}
catch(IOException e)
{
System.out.println(e);
System.exit(1);
}
}
}
```

### *//Server*

```
import java.io.*;
import java.net.*;
import java.util.*;

public class udpserver
{
public byte[] getTime()
{
Date d=new Date();
return d.toString().getBytes();
}
public void active()throws IOException
{
DatagramSocket ds;
DatagramPacket dp;
```

```
DatagramPacket ip;
DatagramPacket op;
InetAddress cadd;
int clientport;
byte[] msg=new byte[10];
byte[] time;
ds=new DatagramSocket(8000);
while(true)
{
ip=new DatagramPacket(msg,msg.length);
ds.receive(ip);
cadd=ip.getAddress();
clientport=ip.getPort();
time=getTime();
op=new DatagramPacket(time,time.length,cadd,clientport);
ds.send(op);
}
}
public static void main(String abc[])
{
udpserver udpserver=new udpserver();
try
{
udpserver.active();
}
catch(IOException e)
{
System.out.println(e);
System.exit(1);
}
}}
```

***Output:***

```
D:\WBT LAB>javac udpserver.java
```

```
D:\WBT LAB>java udpserver
```

```
D:\WBT LAB>javac udpclient.java
```

```
D:\WBT LAB>java udpclient
```

```
Connection established
```

```
Received message from server:Date and Time
```

```
Thu Mar 03 01:08:37 PST 2011
```

=====  
Ex.No. : 8                    Program in Java to implement Database Connectivity  
=====

//---MainJdbc.java---

```
import java.sql.*;
class myjdbc
{
String ename,id,sal;
Connection con;
Statement st;
ResultSet rs;
myjdbc()
{
try
{
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
con=DriverManager.getConnection("jdbc:odbc:Employee","","");
st=con.createStatement();
rs=st.executeQuery("select * from emp");
while(rs.next())
{
System.out.println("Emp Name:" +rs.getString(1));
System.out.println("id  :"+rs.getString(2));
System.out.println("salary:" +rs.getString(3));
System.out.println("\n");
}
}
catch(Exception e){}
}
```

```
}  
class MainJdbc  
{  
public static void main(String args[])  
{  
myjdbc mj=new myjdbc();  
}  
}
```

*//-----Output-----*

D:\WBT LAB>javac MainJdbc.java

D:\WBT LAB>java MainJdbc

Emp Name: T

id :1

salary:20000

Emp Name: S

id :2

salary:40000

Emp Name: P

id :3

salary:25000

Emp Name: M

id :4

salary:27000

Emp Name: G

id :5

salary:30000

Emp Name: P1

id :6

salary:19000

## EX.NO. 9

## JSP PROGRAM FOR ORDER PROCESSING

## FORM.HTML

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<title> Order form </title>
</head>
<body>
<form name="myForm" action="http://localhost:8084/
WebApplication12/order.jsp" method=post>
Enter your Orderno <input type="text" name="orderno" size="20"><br />
Enter your Productname <input type="text" name="pname" size="20"><br />
Enter your Name <input type="text" name="cname" size="20"><br />
Enter your PhoneNumber <input type="text" name="Phone" size="20"><br />
<input type="submit" value="Submit">
</form>
</body>
</html>
```

## ORDER.JSP

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<%@ page language="java" import="java.util.*" import="java.sql.*"
import="java.io.*" errorPage="" %>
<%
String orderno=request.getParameter("orderno");
String pname=request.getParameter("pname");
String cname=request.getParameter("cname");
```

```
String Phone=request.getParameter("Phone");
Connection con=null;
try
{
    Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
    con=DriverManager.getConnection("jdbc:odbc:supplier","","");
    PreparedStatement ps=con.prepareStatement("insert into supplier values(?,?,?,?)");
    ps.setString(1,orderno);
    ps.setString(2,pname);
    ps.setString(3,cname);
    ps.setString(4,Phone);
    ps.executeUpdate();
    response.sendRedirect(response.encodeRedirectURL("success.html"));
}
catch(SQLException e)
{
    out.println(e.getMessage());
    e.printStackTrace();
}
%>
```

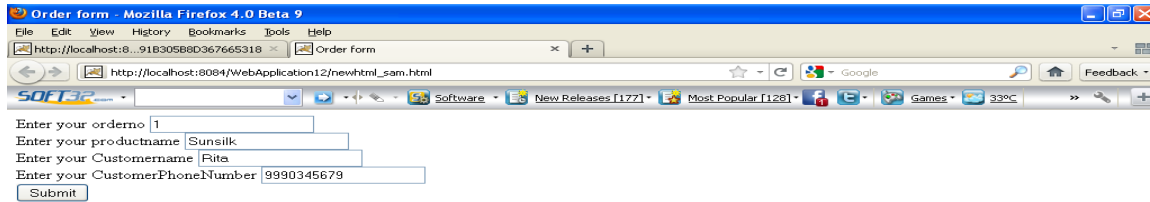
### **SUCCESS.HTML**

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<title>SUCCESS</title>
</head>
<body>
    Successfully Registered!!!
</body>
</html>
```

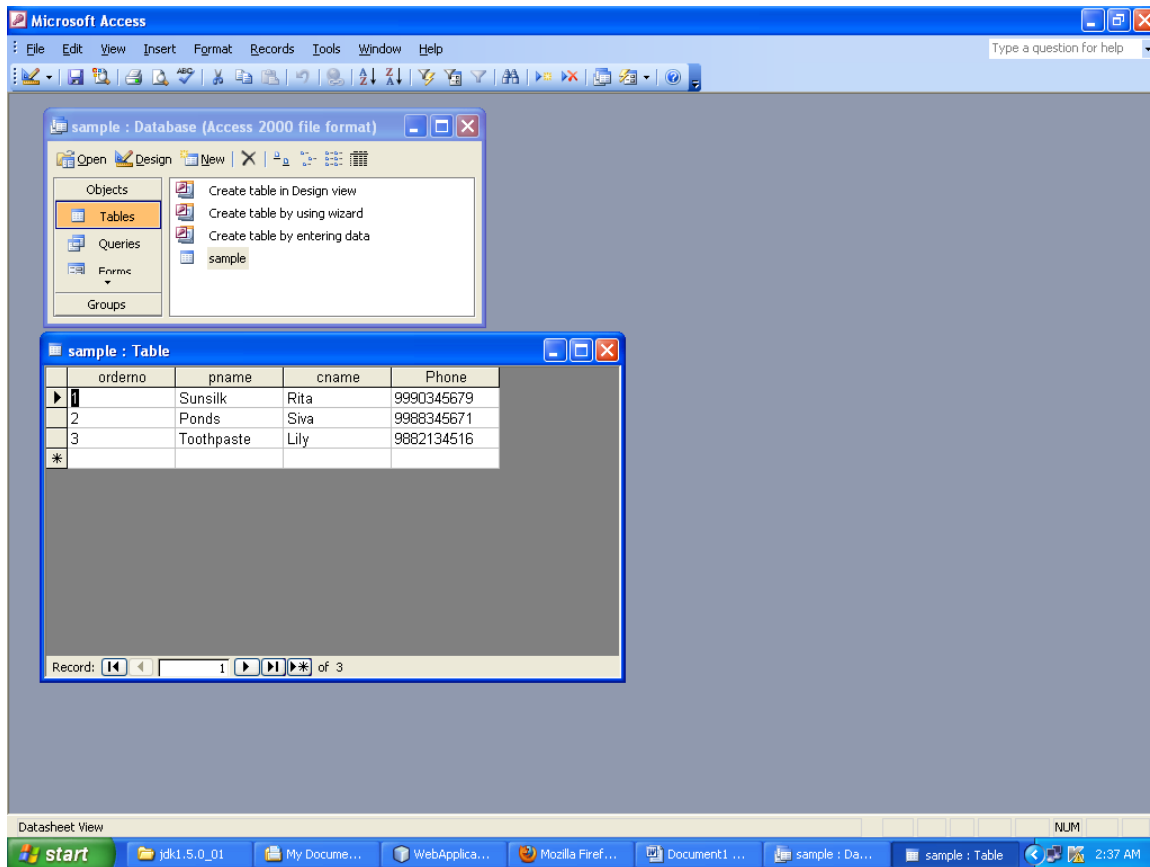


## OUTPUT

### ORDER FORM JSP



### DATABASE (MS ACCESS)



=====  
Ex.No. 10

ASP program using the components  
=====

```
//----mytest.jsp----
<html>
<body>
<%
Set MyBrow=Server.CreateObject("MSWC.BrowserType")
%>
<table border="1" width="65%">
  <tr>
    <td width="52%">Client OS</td>
    <td width="48%"><%=MyBrow.platform%></td>
  </tr>
  <tr>
    <td >Web Browser</td>
    <td ><%=MyBrow.browser%></td>
  </tr>
  <tr>
    <td>Browser version</td>
    <td><%=MyBrow.version%></td>
  </tr>
  <tr>
    <td>Frame support?</td>
    <td><%=MyBrow.frames%></td>
  </tr>
  <tr>
    <td>Table support?</td>
    <td><%=MyBrow.tables%></td>
  </tr>

```

```

<tr>
  <td>Sound support?</td>
  <td><%=MyBrow.backgroundsounds%></td>
</tr> <tr>
  <td>Cookies support?</td>
  <td><%=MyBrow.cookies%></td>
</tr> <tr>
  <td>VBScript support?</td>
  <td><%=MyBrow.vbscript%></td>
</tr> <tr>
  <td>JavaScript support?</td>
  <td><%=MyBrow.javascript%></td>
</tr></table>
</body></html>

```

## OUTPUT

