```
create table EMP19073
(Empno number(4) not null PRIMARY KEY,
Emoname varchar(15) not null,
Job varchar2(25) not null,
Mgr number(4),
Hiredate Date,
Salary number(5) not null,
Comm number(5) default 0,
Deptno number(2) not null);
insert into EMP19073(Empno, Emoname, Job, Mgr, Hiredate, Salary, Comm, Deptno)
values(7369, 'SMIT', 'CLERK', 7902, '17-DEC-80', 1600, 500, 20);
select * from EMP19073;
set linesize 150
insert into EMP19073(Empno, Emoname, Job, Mgr, Hiredate, Salary, Comm, Deptno)
values(7499, 'ALLE', 'SELLSMAN', 7698, '20-FEB-81', 21000, 300, 30);
insert into EMP19073(Empno, Emoname, Job, Mgr, Hiredate, Salary, Comm, Deptno)
values(7566, 'JONE', 'MANNAGER', 7839, '02-APR-81', 29700, 100, 20);
insert into EMP19073(Empno, Emoname, Job, Mgr, Hiredate, Salary, Comm, Deptno)
values(7698, 'BLAK', 'JOBANALYST', 7566, '09-JUN-81', 24800, 1400, 10);
insert into EMP19073(Empno, Emoname, Job, Mgr, Hiredate, Salary, Deptno)
values(7876, 'ADAM', 'CLERK', 7788, '23-MAY-81', 35000, 10);
//DISPLAY ALL INFO ABOUT DEPERTMENT NO. 10
select * from EMP19073 where deptno=10;
//DISPLAY EMPMANE AND SALARY WHOSE SALARY BWT 15000 TO 30000
select Emoname, Salary from EMP19073 where Salary between 15000 and 30000;
//DISPLAY EMPNO AND EMPNAME FROM THE TABLE WHOSE JOB IS CLERK
select Empno, Emoname from EMP19073 where Job='CLERK';
//DISPLAY ALL DISTINCT JOB
select distinct Job from EMP19073;
//LIST THE EMPOLEE DETAILS WHO HAVE JOINED BEFOR 1985
select * from EMP19073 where Hiredate<'01-JAN-1985';
//DISPLAY ALL EMPLOYEE INFO ACCRODING TO THEIR SALARY IN ASCENDING ORDER
select * from EMP19073 order by salary asc;
//LIST THE EMPLOYEES HOWSE JOB IS SALESMAN AND DEPTNO IS 30
select * from EMP19073 where Job='SELLSMAN' and Deptno=30;
//DISLAY THE EMPNO EMPNAME AND SALLARY FOR MGR IS 7698
 select Empno, Emoname, Salary from EMP19073 where Mgr=7698;
//LIST ALL EMPLOYEE DETAILS WHOSE DALLY SALARY MORE THAN 500
select * from EMP19073 where (Salary/30)>500;
//LIST OF EMPLOYEES IN DEPT NO 10 AND 20 IN ORDER OF EMPNAME
select * from EMP19073 where deptno =10 or deptno=20 order by Emoname asc;
```

```
select * from EMP19073 where deptno in(10,20) order by Emoname asc;
//DISPLAY EMPLOYEE NAMES STARTING WITH S
select Emoname from EMP19073 where Emoname like 'S%';
//DISPLAY EMPNAME WHERE A ALPHABATE IS PRESENT IN BETWEEN
select Emoname from EMP19073 where Emoname like '%AD%';
//DIPLAY EMPNAME AND YEARLY SALARY OF ALL EMPLOYEES
select Emoname "EMP_NAME", Salary*12+NVL(Comm, 0) "YEARLY_SALARY" from EMP19073;
......
//display all employee info whose comm is null
select * from EMP19073 where Comm=null;
//update employee info of empno 7499, set sallary 55000
update EMP19073 set Salary=55000 where Empno=7499;
//diplay maximum, minimum,avg salary and sallary sum from the emp table
select max(Salary) "MAXSAL", min(Salary) "MINSAL", avg(Salary) "AVGSAL",
sum(Salary) "Summation" from EMP19073;
//display total no of rows in emp table
select count(*) from EMP19073;
//display no of employees of emp table whose job is sells man
select count(Job) from EMP19073 where Job='SELLSMAN';
//display the details of an emp. who is erning highest from the org.
select * from EMP19073 where Salary in (select max(Salary) from EMP19073);
//second highest sallary
select * from EMP19073 where Salary in (select max(Salary) from EMP19073 where
Salary not in (select max(Salary) from EMP19073));
//display emp deails of each dept no. who is earning highest salary
select * from EMP19073 where Salary in (select max(Salary) from EMP19073 group by
Deptno);
//modify the attribute name emp no to Eno.
alter table EMP19073 rename column Empno to Eno;
//display emp info whose salary given by the user
select * from EMP19073 where Salary= &Sal;
```

```
Job='&Job';
//display the avg salary of each job
select Job, avg(Salary) "AVGSAL" from EMP19073 group by Job;
//display all emp name along with their salary and name should be 1st letter caps
others are small
select initcap(Emoname) "EMPNAME" from EMP19073;
//update the emp info whose job is analyst
update EMP19073 set Salary=50500 where Job='JOBANALYST';
//display the emp name whose name is exactly 4 without using length fun
select Emoname from EMP19073 where Emoname like '____';
//count the emp no under each dept.
select count(*) from EMP19073 group by Deptno;
//delete a record from the table whose job is analyst
delete from EMP19073 where Job='JOBANALYST';
......
insert into EMP19073(Eno,Emoname, Job, Mgr, Hiredate, Salary, Comm, Deptno)
values(7788, 'SCOT', 'ANALYST', 7566, '19-APR-83', 32000, 200, 30);
delete from EMP19073 where Emoname='SCOT';
insert into EMP19073(Eno,Emoname,Job,Hiredate,Salary,Comm,Deptno)
values(7839, 'KING', 'PRESIDENT', '25-MAY-86', 45000, 200, 10);
insert into EMP19073(Eno,Emoname, Job, Mgr, Hiredate, Salary, Deptno)
values(7900, 'JAME', 'CLERK', 7788, '03-DEC-82', 21000, 30);
insert into EMP19073(Eno, Emoname, Job, Mgr, Hiredate, Salary, Comm, Deptno)
values(7934, 'MILL', 'MANAGER', 7698, '23-JAN-83', 17000, 340, 30);
insert into EMP19073(Eno,Emoname,Job,Mgr,Hiredate,Salary,Deptno)
values(7902, 'FORD', 'ANALYST', 7566, '17-NOV-84', 40000, 20);
create table DEPT073
(Deptno number(2) not null PRIMARY KEY,
Dname varchar(25) not null,
Dlocation varchar2(25) not null);
```

```
insert into DEPT073(Deptno, Dname, Dlocation)
values(10, 'HRD', 'MUMBAI');
insert into DEPT073(Deptno, Dname, Dlocation)
values(20, 'RESEARCH', 'KOLKATA');
insert into DEPT073(Deptno, Dname, Dlocation)
values(30, 'SALES', 'DELHI');
insert into DEPT073(Deptno, Dname, Dlocation)
values(40, 'OPERATION', 'PUNE');
select * from DEPT073;
//display all emp name and their dept info from the exsiting tables(EMP & DEPT)
select e.Emoname, d.Deptno, d.Dname, d.Dlocation from EMP19073 e, DEPT073 d where
e.Deptno=d.Deptno;
//show all emp info whose dlocation is not kolkata
select e.Emoname, d.Deptno, d.Dname, d.Dlocation from EMP19073 e, DEPT073 d where
e.Deptno=d.Deptno and Dlocation!='KOLKATA';
// list the emp name, job, salary, and deptname for everyone in company except
clerk. sort on salary in decending order
select e.Emoname, e.Job, e.Salary, d.Deptno from EMP19073 e, DEPT073 d where
e.Deptno=d.Deptno and e.Job!='CLERK' order by e.Salary desc;
//find all emp who join the company before their manager
select e.Emoname, m.Emoname from EMP19073 e, EMP19073 m where e.Mgr=m.Eno and
e.Hiredate<m.Hiredate;
//list the emp by the name and no along with their mann name and no.
select e.Emoname, e.Eno, m.Emoname, m.Eno from EMP19073 e, EMP19073 m where
e.Mgr=m.Eno;
//In which year did most people join the company? Display the year and no of emp.
select dt,ct from(select to_char(Hiredate,'YYYY') dt, count(*) ct from EMP19073
group by to_char (Hiredate, 'YYYY')) order by 2 desc;
//find the most recenly hire emp who earn highest salary greater han the avg sal in
that dept. short in dept no order.
select e.Emoname, e.Salary, e.Hiredate from EMP19073 e where (e.Deptno, e.Hiredate) in
(select b.Deptno, max(b.Hiredate) from EMP19073 b where b.Salary<(select
avg(Salary) from EMP19073 where Deptno=b.Deptno) group by Deptno);
//who are the top three eaners in the company
select Emoname, Salary from (select Emoname, Salary from EMP19073 order by Salary
desc) where rownum<=3;
```

select rownum from EMP19073;

```
//list the emp those are having 4 char in their name and 3rd char must be "a"
select Emoname from EMP19073 where Emoname like '__A_';
//list the emp whose annual salary ranging from 18000 to 34000
select Emoname from EMP19073 where Salary*12+NVL(Comm,0) between 18000 and 34000;
//display all emp info whose dept location at pune but deptno is not 10
select e.Emoname, d.Deptno, d.Dname, d.Dlocation from EMP19073 e, DEPT073 d where
e.Deptno=d.Deptno and d.Dlocation='PUNE' and d.Deptno!=10;
//display only dept location of the emp "smith"
select d.Dlocation from EMP19073 e,DEPT073 d where e.Deptno=d.Deptno and
e.Emoname='SMIT';
//find the emp name and job of the emp who have earn max sal and commision
select Emoname, Job from EMP19073 where Salary in (select max(Salary) from EMP19073)
and comm!=0;
//find the max avg sal drawn from each job except the job is manager
select max(avg(Salary)) "MAXAVGSAL" from EMP19073 where Job!='MANNAGER' group by
job;
//list the emp whose sal is starting whith numeric value 2
select Emoname from EMP19073 where Salary like '2%';
//list the emp who have join in the month of jan
select emoname from emp19073 where to_char(hiredate, 'MON')='JAN';
//list the emp who are clerck and having exprience more than 4 years
select emoname from emp19073 where months_between(sysdate, hiredate)/12>4 and
job='CLERK';
//list the emp details along with their dept whose are at delhi
select e.Emoname, d.Deptno, d.Dname, d.Dlocation from EMP19073 e, DEPT073 d where
e.Deptno=d.Deptno and d.Dlocation='DELHI';
//list the emp whose sal is grater than "smith" sal
select emoname from EMP19073 where (select salary from emp19073 where
emoname='SMIT')<salary;</pre>
//list the details of the most recently hire emp of dept no 20
select * from emp19073 where Hiredate in(select max(hiredate) from emp19073 where
deptno=20);
```

```
//list the details of the dept along with empno and empname or without the emp.
select * from emp19073 e, dept073 d where e.deptno(+)=d.deptno;
create table ITEMINFO
(I_NO number(10) not null,
I_NAME varchar2(25) not null,
I_PRICE number(1,2) not null,
I_QTY number(3) not null,
constraint PK_Ino primary key(I_NO),
constraint CH_Ino check(I_NO between 1 and 10),
constraint CH Iname check(I NAME = INITCAP(I NAME)),
constraint CH_Iprice check(I_PRICE between 0.00 and 10.00),
constraint CH_Qyt check(I_QTY>5)
);
insert into ITEMINFO(I_NO,I_NAME,I_PRICE,I_QTY)
values(1, 'Screw', 2.25, 50);
insert into ITEMINFO(I_NO,I_NAME,I_PRICE,I_QTY)
values(2, 'Nut', 5.00, 110);
insert into ITEMINFO(I_NO,I_NAME,I_PRICE,I_QTY)
values(3, 'Bolt', 6.99, 750);
insert into ITEMINFO(I_NO,I_NAME,I_PRICE,I_QTY)
values(4, 'Hammer', 9.99, 125);
insert into ITEMINFO(I_NO,I_NAME,I_PRICE,I_QTY)
values(5, 'Washer', 1.39, 100);
insert into ITEMINFO(I_NO,I_NAME,I_PRICE,I_QTY)
values(6, 'Nail', 0.99, 500);
create table CUSTOMER
(C_NO number(5) not null,
C_NAME varchar2(25) not null,
C_STATE varchar2(2) default 'WB',
ITEM_NO number(10) not null,
constraint PK_Cno primary key(C_NO),
constraint CH_Cno check(C_NO between 10001 and 20000),
constraint CH_State check(C_STATE in ('WB', 'UP', 'AP', 'MP'))
);
insert into CUSTOMER(C_NO,C_NAME,C_STATE,ITEM_NO)
values(10001, 'Prakash', 'UP', 1);
```

```
insert into CUSTOMER(C_NO,C_NAME,C_STATE,ITEM_NO)
values(10002, 'Mukesh', 'AP', 3);
insert into CUSTOMER(C_NO,C_NAME,C_STATE,ITEM_NO)
values(10003, 'MUrty', 'UP', 5);
insert into CUSTOMER(C_NO,C_NAME,C_STATE,ITEM_NO)
values(10004, 'Ranjan', 'WB', 6);
//display all itemno and item quantity from the item table
select I_NO,I_QTY from ITEMINFO;
//display all details of th customer prakash
select * from CUSTOMER where C_NAME='Prakash';
//display all customer who are from up
select C_NAME from CUSTOMER where C_STATE='UP';
//display all customer who are from ap or wb
select C NAME from CUSTOMER where C STATE='AP' OR C STATE='WB';
//display all customer details along with items whose name ending with 'h'.
select e.I_NO,e.I_NAME,e.I_PRICE,e.I_QTY,d.C_NO,d.C_NAME,d.C_STATE,d.ITEM_NO from
ITEMINFO e, CUSTOMER d where e.I_NO=d.ITEM_NO and d.C_NAME like '%h';
//find all items details which price within 5.6
select * from ITEMINFO where I_PRICE<=5.6;
//display the item details as per quantity descending order
select * from ITEMINFO order by I_QTY desc;
//sort all customer in decreasing order of their state
select * from CUSTOMER order by C_STATE desc;
//find all the items which price greater than 5.6 and quantity less than 100
select * from ITEMINFO where I_PRICE>5.6 and I_QTY<100;
//find all items which price does not lie in between 4 to 9
select * from ITEMINFO where I_PRICE not between 4 and 9;
//change the quantity value 70 for the item no 1
update ITEMINFO set I_QTY=70 where I_NO=1;
//change the item price of Nut to 4.7
update ITEMINFO set I_PRICE=4.7 where I_NAME='Nut';
//Delete all items which item quantity more than 600
delete from ITEMINFO where I_QTY>600;
//insert into iteminfo table by user defined representation. information's are
"7, Bolt, 7.88, 590"
insert into iteminfo values(&I_NO,'&I_NAME',&I_PRICE,&I_QTY);
//Calculate the summation of quantity.
```

```
select SUM(I_QTY) from iteminfo;
//Count the number of rows of iteminfo table
select count(*) from iteminfo;
//Insert phoneno attribute into Customer table with size 10
ALTER TABLE iteminfo
ADD Phoneno number(10);
//Display customer number customer name & item name from the given table where
item name should not be Nail
select c.C_NO,c.C_NAME,i.I_NAME from CUSTOMER c,iteminfo i where i.I_NO=c.ITEM_NO
and i.I_NAME!='Nail';
//display all info from both table with item price <5.12 and item quantity>200
select * from customer c,iteminfo i where i.I_NO=c.ITEM_NO and i.I_PRICE<5.12 and
i.I_QTY>200;
//Count no of customers belongs to "UP"
select count(*) from customer where C_STATE='UP';
//display all info from iteminfo table of lowest quantity.
select * from iteminfo where I_QTY in (select min(I_QTY) from iteminfo);
//display all constraint of iteminfo table
select CONSTRAINT_NAME, CONSTRAINT_TYPE from user_constraints where
table_name='ITEMINFO';
//display no of customers of each state where counted value of customers more than
select count(*) from customer group by C_State having count(*)>1;
//perform the right outer join between the tables where information's of the some
right side column must be blank or empty
select * from ITEMINFO e, CUSTOMER d where e.I_NO(+)=d.ITEM_NO;
//create a simple view[Item_Price] with I_Name and I_Price only
create or replace view Item_Price as(select I_Name, I_Price from iteminfo);
select * from Item_Price;
//display all info from the view
create or replace view All_Item as(select * from iteminfo);
select * from All_Item;
//create a sequence that can be used to enter new items into Item_XXX table
create sequence Item_XXX start with 10 increment by 1;
```

```
//Add a new item into the Item_XXX table with the sequence just create
Insert into Iteminfo(I_NO,I_NAME,I_PRICE,I_QTY)
values(Item_XXX.nextval, 'Abcs', 2.5, 303);
select * from iteminfo;
//create BOOK table
create table BOOK
(NO number(3) not null,
C_NAME varchar2(25) not null,
PRICE number(6,2) not null,
PUBLISHER varchar2(2) default 'AC',
constraint PK_no primary key(NO),
constraint CH_no check(NO between 100 and 145),
constraint CH_PUBLISHER check(PUBLISHER in ('AB', 'PQ', 'RS', 'AC'))
);
desc BOOK;
create sequence book_info increment by 2 start with 100;
insert into BOOK values(book_info.nextval, 'Math', 1022.25, 'AB');
insert into BOOK values(book_info.nextval, 'Phy', 2135.00, 'PO');
insert into BOOK values(book_info.nextval,'Object Technology',2406.99,'RS');
insert into BOOK values(book info.nextval, 'Network', 1259.99, 'AB');
insert into BOOK values(book_info.nextval,'Cloud Computing',1654.39,'AC');
//display all records of the table
select * from BOOK;
//display all books in ascending order.
select C_NAME from book order by C_NAME asc;
//sort all book as per price descending order
select C_NAME from book order by PRICE desc;
//display numbers of books each publisher
select publisher,count(*) from BOOK group by PUBLISHER;
//insert one tuple where NO comes form sequence and other two info are DBMS,2341.50
insert into BOOK values(book_info.nextval, 'DBMS', 2341.50);
```

```
//find the total cost of all books;
select SUM(PRICE) from BOOK;
//display the details of most costly book
select * from book where PRICE in (select max(PRICE) from BOOK);
//display all book where book name ending with 'd' or 'y'
select C_NAME from BOOK where C_NAME like '%d' or C_NAME like '%y';
//update the book name 'phy' to 'psychology' and price 4300.00
update BOOK set C_NAME='psychology', PRICE=4300.00 where C_NAME='Phy';
//create a view of books with the name Book info and consist of all record
create or replace view Book_info1 as(select * from BOOK);
select * from Book_info1;
ED ADD;
DECLARE
N1 NUMBER(5);
N2 NUMBER(5);
RESULT NUMBER(6);
BEGIN
N1:=#
N2:=#
RESULT:=N1+N2;
DBMS_OUTPUT.PUT_LINE('THE RESULT IS: '||RESULT);
END;
SET SERVEROUTPUT ON;
ED FACT;
DECLARE
f number:=1;
n number:=&1;
BEGIN
while n>0 loop
f:=n*f;
n:=n-1;
end loop;
dbms_output.put_line(f);
end;
ed fact;
declare
n number;
f number:=1;
i number;
begin
```

```
n:=&n;
for i in 1..n
loop
f:=f*i;
end loop;
dbms_output.put_line('factorial= '||f);
end;
create table Radius_Area(
Redius number(3) not null,
Area number(14,2) not null
);
declare
r number(3);
area number(14,2);
p constant number(3,2):=3.14;
begin
for r in 2..10
loop
area:=p*power(r,2);
insert into Radius_Area values(r, area);
end loop;
end;
```