Problem 1.1:

create table EMP(EMPNO NUMBER(6),ENAME VARCHAR2(20) not null,JOB VARCHAR2(10) not null,MGR NUMBER(4),DEPTNO NUMBER(3),SAL NUMBER(7,2),constraint pk\_emp primary key(empno));

Output:

Table created.

Problem 1.2:

alter table EMP add COMMISSION NUMBER(7,2);

Output:

Table altered.

Problem 1.3:

alter table EMP modify(JOB varchar2(20));

Output:

Table altered.

Problem 1.4:

create table dept(DEPTNO NUMBER(2),DNAME VARCHAR2(10) not null,LOC VARCHAR2(10),constraint pk\_dept primary key(deptno));

Output:

Table created.

Problem 1.5:

alter table EMP add constraint fk\_empdept foreign key(DEPTNO) references dept(DEPTNO);

Output:

Table altered.

Problem 1.6:

alter table EMP add constraint c1 check (EMPNO>100);

Output:

Table altered.

Problem 1.7:

alter table EMP modify SAL default 5000;

Output:

Table altered.

Problem 1.8:

alter table EMP add Dob DATE;

Output:

Table altered.

Problem 2.1:

alter table dept modify(DNAME varchar2(20));

alter table dept modify(LOC varchar2(20));

insert into dept values(10,'MANAGEMENT','MAIN BLOCK');

insert into dept values(20,'DEVELOPMENT','MANUFACTURING UNIT');

insert into dept values(30,'MAINTAINANCE','MAIN BLOCK');

insert into dept values(40,'TRANSPORT','ADMIN BLOCK');

insert into dept values(50,'SALES','HEAD OFFICE');

Output:

DEPTNO DNAME LOC

10 MANAGEMENT MAIN BLOCK

20 DEVELOPMENT MANUFACTURING UNIT

30 MAINTAINANCE MAIN BLOCK

40 TRANSPORT ADMIN BLOCK

50 SALES HEAD OFFICE

Problem 2.2:

insert into EMP values(7369,'SMITH','CLERK',7566,20,800,0,'17-DEC-1980');

insert into EMP values(7399,'ASANT','SALESMAN',7566,20,1600,300,'20-FEB-1981');

insert into EMP values(7499,'ALLEN','SALESMAN',7698,30,1600,300,'20-FEB-1981');

insert into EMP values(7521,'WARD','SALESMAN',7698,30,1250,500,'22-FEB-1982');

insert into EMP values(7566,'JONES','MANAGER',7839,20,5975,500,'02-APR-1981');

insert into EMP values(7698,'BLAKE','MANAGER',7839,30,9850,1400,'01-MAY-1979');

insert into EMP values(7611,'SCOTT','HOD',7839, 10,3000,NULL,'12-JUN-1976');

insert into EMP values(7839,'CLARK','CEO',NULL ,10,9900,NULL,'16-MAR-1972');

insert into EMP values(7368,'FORD','SUPERVIS',7366,20,800,0,'17-DEC-1980');

insert into EMP values(7599,'ALLEY','SALESMAN',7698,30,1600,300,'20-FEB-1981');

insert into EMP values(7421,'DRANK','CLERCK',7698,30,1250,500,'22-JAN-1982');

Output:

EMPNO ENAME JOB MGR DEPTNO SAL COMMISSION DOB

7369 SMITH CLERK 7566 20 800 0 17-DEC-80

7399 ASANT SALESMAN 7566 20 1600 300 20-FEB-81

7499 ALLEN SALESMAN 7698 30 1600 300 20-FEB-81

7521 WARD SALESMAN 7698 30 1250 500 22-FEB-82

7566 JONES MANAGER 7839 20 5975 500 02-APR-81

7698 BLAKE MANAGER 7839 30 9850 1400 01-MAY-79

7611 SCOTT HOD 7839 10 3000 - 12-JUN-76

7839 CLARK CEO - 10 9900 - 16-MAR-72

7368 FORD SUPERVIS 7366 20 800 0 17-DEC-80

7599 ALLEY SALESMAN 7698 30 1600 300 20-FEB-81

7421 DRANK CLERCK 7698 30 1250 500 22-JAN-82

Problem 2.3:

update EMP set COMMISSION = 1000 where JOB='MANAGER';

Problem 2.4:

create table employee as select \* from EMP;

Problem 2.5:

delete from employee where JOB='SUPERVISOR';

Problem 2.6:

delete from employee where EMPNO=7599;

Problem 2.7:

select \* from employee order by SAL;

Output:

EMPNO ENAME JOB MGR DEPTNO SAL COMMISSION DOB

7369 SMITH CLERK 7566 20 800 0 17-DEC-80

7368 FORD SUPERVIS 7366 20 800 0 17-DEC-80

7521 WARD SALESMAN 7698 30 1250 500 22-FEB-82

7421 DRANK CLERCK 7698 30 1250 500 22-JAN-82

7399 ASANT SALESMAN 7566 20 1600 300 20-FEB-81

7499 ALLEN SALESMAN 7698 30 1600 300 20-FEB-81

7611 SCOTT HOD 7839 10 3000 - 12-JUN-76

7566 JONES MANAGER 7839 20 5975 1000 02-APR-81

7698 BLAKE MANAGER 7839 30 9850 1000 01-MAY-79

7839 CLARK CEO - 10 9900 - 16-MAR-72

Problem 2.8:

select \* from employee order by SAL desc;

Output:

EMPNO ENAME JOB MGR DEPTNO SAL COMMISSION DOB

7839 CLARK CEO - 10 9900 - 16-MAR-72

7698 BLAKE MANAGER 7839 30 9850 1000 01-MAY-79

7566 JONES MANAGER 7839 20 5975 1000 02-APR-81

7611 SCOTT HOD 7839 10 3000 - 12-JUN-76

7399 ASANT SALESMAN 7566 20 1600 300 20-FEB-81

7499 ALLEN SALESMAN 7698 30 1600 300 20-FEB-81

7521 WARD SALESMAN 7698 30 1250 500 22-FEB-82

7421 DRANK CLERCK 7698 30 1250 500 22-JAN-82

7369 SMITH CLERK 7566 20 800 0 17-DEC-80

7368 FORD SUPERVIS 7366 20 800 0 17-DEC-80

Problem 2.9:

select \* from employee where DEPTNO=30;

Output:

EMPNO ENAME JOB MGR DEPTNO SAL COMMISSION DOB

7499 ALLEN SALESMAN 7698 30 1600 300 20-FEB-81

7521 WARD SALESMAN 7698 30 1250 500 22-FEB-82

7698 BLAKE MANAGER 7839 30 9850 1000 01-MAY-79

7421 DRANK CLERCK 7698 30 1250 500 22-JAN-82

Problem 2.10:

select distinct DEPTNO from employee;

Output:

DEPTNO

30

10

20

Problem 2.11:

select \* from EMP order by ename;

Output:

EMPNO ENAME JOB MGR DEPTNO SAL COMMISSION DOB

7499 ALLEN SALESMAN 7698 30 1600 300 20-FEB-81

7599 ALLEY SALESMAN 7698 30 1600 300 20-FEB-81

7399 ASANT SALESMAN 7566 20 1600 300 20-FEB-81

7698 BLAKE MANAGER 7839 30 9850 1000 01-MAY-79

7839 CLARK CEO - 10 9900 - 16-MAR-72

7421 DRANK CLERCK 7698 30 1250 500 22-JAN-82

7368 FORD SUPERVIS 7366 20 800 0 17-DEC-80

7566 JONES MANAGER 7839 20 5975 1000 02-APR-81

7611 SCOTT HOD 7839 10 3000 - 12-JUN-76

7369 SMITH CLERK 7566 20 800 0 17-DEC-80

7521 WARD SALESMAN 7698 30 1250 500 22-FEB-82

Problem 2.12:

create table manager as select \* from EMP where JOB='MANAGER';

Problem 2.13:

select \* from EMP where COMMISSION is null;

Output:

EMPNO ENAME JOB MGR DEPTNO SAL COMMISSION DOB

7611 SCOTT HOD 7839 10 3000 - 12-JUN-76

7839 CLARK CEO - 10 9900 - 16-MAR-72

Problem 2.14:

select ENAME,DNAME from EMP,dept where EMP.DEPTNO=dept.DEPTNO;

Output:

ENAME DNAME

SMITH DEVELOPMENT

ASANT DEVELOPMENT

ALLEN MAINTAINANCE

WARD MAINTAINANCE

JONES DEVELOPMENT

BLAKE MAINTAINANCE

SCOTT MANAGEMENT

CLARK MANAGEMENT

FORD DEVELOPMENT

ALLEY MAINTAINANCE

DRANK MAINTAINANCE

Problem 3.1:

select \* from emp where deptno=7369 or deptno=7499;

Output:

no data found

Problem 3.2:

select \* from emp where substr(ename,1,1) in ('S');

Output:

EMPNO ENAME JOB MGR DEPTNO SAL COMMISSION DOB

7369 SMITH CLERK 7566 20 800 0 17-DEC-80

7611 SCOTT HOD 7839 10 3000 - 12-JUN-76

Problem 3.3:

select \* from emp where substr(ename,1,1) not in ('S');

Output:

EMPNO ENAME JOB MGR DEPTNO SAL COMMISSION DOB

7399 ASANT SALESMAN 7566 20 1600 300 20-FEB-81

7499 ALLEN SALESMAN 7698 30 1600 300 20-FEB-81

7521 WARD SALESMAN 7698 30 1250 500 22-FEB-82

7566 JONES MANAGER 7839 20 5975 1000 02-APR-81

7698 BLAKE MANAGER 7839 30 9850 1000 01-MAY-79

7839 CLARK CEO - 10 9900 - 16-MAR-72

7368 FORD SUPERVIS 7366 20 800 0 17-DEC-80

7599 ALLEY SALESMAN 7698 30 1600 300 20-FEB-81

7421 DRANK CLERCK 7698 30 1250 500 22-JAN-82

Problem 3.4:

select \* from emp where empno between 7500 and 7600;

Output:

EMPNO ENAME JOB MGR DEPTNO SAL COMMISSION DOB

7521 WARD SALESMAN 7698 30 1250 500 22-FEB-82

7566 JONES MANAGER 7839 20 5975 1000 02-APR-81

7599 ALLEY SALESMAN 7698 30 1600 300 20-FEB-81

Problem 3.5:

select \* from emp where empno not between 7500 and 7600;

Output:

EMPNO ENAME JOB MGR DEPTNO SAL COMMISSION DOB

7369 SMITH CLERK 7566 20 800 0 17-DEC-80

7399 ASANT SALESMAN 7566 20 1600 300 20-FEB-81

7499 ALLEN SALESMAN 7698 30 1600 300 20-FEB-81

7698 BLAKE MANAGER 7839 30 9850 1000 01-MAY-79

7611 SCOTT HOD 7839 10 3000 - 12-JUN-76

7839 CLARK CEO - 10 9900 - 16-MAR-72

7368 FORD SUPERVIS 7366 20 800 0 17-DEC-80

7421 DRANK CLERCK 7698 30 1250 500 22-JAN-82

Problem 3.6:

select sqrt(sal) from emp;

Output:

SQRT(SAL)

28.28427124746190097603377448419396157139

40

40

35.35533905932737622004221810524245196424

77.29812416870153259825421441664076250417

99.24716620639603934585232863145622447027

54.77225575051661134569697828008021339527

99.49874371066199547344798210012060051781

28.28427124746190097603377448419396157139

40

35.35533905932737622004221810524245196424

Problem 3.7:

select count(\*) from emp;

Output:

COUNT(\*)

11

Problem 3.8:

select sum(sal),avg(sal) from emp;

Output:

SUM(SAL) AVG(SAL)

37625 3420.454545454545454545454545454545454545

Problem 3.9:

select max(sal) as max\_salary,min(sal) as min\_salary from emp;

Output:

MAX\_SALARY MIN\_SALARY

9900 800

Problem 3.10:

select sum(sal) from emp;

Output:

SUM(SAL)

37625

Problem 3.11:

select job,sum(sal) from emp group by job;

Output:

JOB SUM(SAL)

CEO 9900

SUPERVIS 800

CLERK 800

SALESMAN 6050

MANAGER 15825

HOD 3000

CLERCK 1250

Problem 3.12:

select to\_char(to\_date('14-jul-09'),'month') from dual;

Output:

TO\_CHAR(TO\_DATE('14-JUL-09'),'MONTH')

july

Problem 3.13:

select to\_date(dob,'dd-mm-yy') from emp;

Output:

TO\_DATE(DOB,'DD-MM-YY')

17-DEC-80

20-FEB-81

20-FEB-81

22-FEB-82

02-APR-81

01-MAY-79

12-JUN-76

16-MAR-72

17-DEC-80

20-FEB-81

22-JAN-82

Problem 3.14:

select add\_months(dob,2) from emp;

Output:

ADD\_MONTHS(DOB,2)

17-FEB-81

20-APR-81

20-APR-81

22-APR-82

02-JUN-81

01-JUL-79

12-AUG-76

16-MAY-72

17-FEB-81

20-APR-81

22-MAR-82

Problem 3.15:

select last\_day('05-oct-09') from dual;

Output:

LAST\_DAY('05-OCT-09')

31-OCT-09

Problem 3.16:

select to\_char(round(to\_date(dob),’day’),'yyyy-mm-dd') from emp;

Problem 3.17:

select (sysdate-60) from dual;

Output:

(SYSDATE-60)

15-MAY-20

Problem 3.18:

select ename,sal,0.15\*sal as raise from emp;

Output:

ENAME SAL RAISE

SMITH 800 120

ASANT 1600 240

ALLEN 1600 240

WARD 1250 187.5

JONES 5975 896.25

BLAKE 9850 1477.5

SCOTT 3000 450

CLARK 9900 1485

FORD 800 120

ALLEY 1600 240

DRANK 1250 187.5

Problem 3.19:

select \* from emp where substr(ename,1,1) in ('B','C');

Output:

EMPNO ENAME JOB MGR DEPTNO SAL COMMISSION DOB

7698 BLAKE MANAGER 7839 30 9850 1000 01-MAY-79

7839 CLARK CEO - 10 9900 - 16-MAR-72

Problem 3.20:

select ename,sal,mgr from emp where sal in (select min(sal) from emp group by mgr);

Output:

ENAME SAL MGR

SMITH 800 7566

WARD 1250 7698

SCOTT 3000 7839

CLARK 9900 -

FORD 800 7366

DRANK 1250 7698

Problem 3.21:

select count(empno),(select dname from dept where dept.deptno=emp.deptno)dname from emp group by deptno;

Output:

COUNT(EMPNO) DNAME

5 MAINTAINANCE

2 MANAGEMENT

4 DEVELOPMENT

Problem 3.22:

select ename from emp where length(ename)<=5;

Output:

ENAME

SMITH

ASANT

ALLEN

WARD

JONES

BLAKE

SCOTT

CLARK

FORD

ALLEY

DRANK

Problem 3.23:

select ename,mgr from emp where mgr in(77499,7566,7611);

Output:

ENAME MGR

SMITH 7566

ASANT 7566

Problem 3.24:

select count(distinct(job)) from emp;

Output:

COUNT(DISTINCT(JOB))

7

Problem 3.25:

select max(sal)-min(sal) from emp;

Output:

MAX(SAL)-MIN(SAL)

9100

Problem 3.26:

select count(distinct(deptno)) from emp;

OOutput:

COUNT(DISTINCT(DEPTNO))

3

Problem 3.27:

select ename,dob from emp where to\_char(dob,'MM') in ('02');

Output:

ENAME DOB

ASANT 20-FEB-81

ALLEN 20-FEB-81

WARD 22-FEB-82

ALLEY 20-FEB-81

Problem 3.28:

select ename from emp where to\_char(dob,'MM') in (extract(month from sysdate));

Output:

no data found

Problem 3.29:

select ename from emp where ename like 'S%H';

Output:

ENAME

SMITH

Problem 3.30:

select ename from emp where sal>6000;

Output:

ENAME

BLAKE

CLARK

Problem 4.1:

select ENAME,DNAME from EMP,DEPT where emp.deptno=dept.deptno and (DNAME='MAINTAINANCE' OR DNAME='DEVELOPMENT');

Output:

ENAME DNAME

SMITH DEVELOPMENT

ASANT DEVELOPMENT

ALLEN MAINTAINANCE

WARD MAINTAINANCE

JONES DEVELOPMENT

BLAKE MAINTAINANCE

FORD DEVELOPMENT

ALLEY MAINTAINANCE

DRANK MAINTAINANCE

Problem 4.2:

select ename,sal from emp where sal>(select min(sal) from emp) and job like ('M%');

Output:

ENAME SAL

JONES 5975

BLAKE 9850

Problem 4.3:

select ename from emp where job=(select job from emp where ename='JONES') and ename not in ('JONES');

Output:

ENAME

BLAKE

Problem 4.4:

select \* from emp where sal>(select max(sal) from emp where deptno=30);

Output:

EMPNO ENAME JOB MGR DEPTNO SAL COMMISSION DOB

7839 CLARK CEO - 10 9900 - 16-MAR-72

Problem 4.5:

select ename from emp where job=(select job from emp where ename='JONES') and sal>=(select sal from emp where ename='FORD') and ename not in ('JONES');

Output:

ENAME

BLAKE

Problem 4.6:

select ename,job from emp where deptno=20 and job in(select job from dept,emp where dept.deptno=emp.deptno and dname = 'management');

Output:

no data found

Problem 4.7:

select ename,deptno,sal from emp e1 where sal > (select avg(sal) from emp e2 where e1.deptno=e2.deptno);

Output:

ENAME DEPTNO SAL

JONES 20 5975

BLAKE 30 9850

CLARK 10 9900

Problem 4.8:

select ename,job,dname from emp,dept where emp.deptno=dept.deptno;

Output:

ENAME JOB DNAME

SMITH CLERK DEVELOPMENT

ASANT SALESMAN DEVELOPMENT

ALLEN SALESMAN MAINTAINANCE

WARD SALESMAN MAINTAINANCE

JONES MANAGER DEVELOPMENT

BLAKE MANAGER MAINTAINANCE

SCOTT HOD MANAGEMENT

CLARK CEO MANAGEMENT

FORD SUPERVIS DEVELOPMENT

ALLEY SALESMAN MAINTAINANCE

DRANK CLERCK MAINTAINANCE

Problem 4.9:

select ename from emp where job in(select job from emp,dept where emp.deptno=dept.deptno and loc='MAIN BLOCK') and deptno not in (select deptno from dept where loc='MAIN BLOCK');

Output:

ENAME

ASANT

JONES

Problem 4.10:

select ename from emp where deptno=10 and job in(select job from emp,dept where emp.deptno=dept.deptno and dname='DEVELOPMENT');

Output:

no data found

Problem 4.11:

select ename from emp where job=(select job from emp where ename='FORD') and sal=(select sal from emp where ename='FORD') and ename not in ('FORD');

Output:

no data found

Problem 4.12:

select dname from dept where (select count(\*) from emp where job='SALESMAN' and dept.deptno=emp.deptno ) >= 2;

Output:

DNAME

MAINTAINANCE

Problem 4.13:

select ename from emp where deptno=20 and job in(select job from emp where deptno=30);

Output:

ENAME

ASANT

JONES

Problem 4.14:

select ename from emp where sal>(select max(sal) from emp where deptno=20 or deptno=30);

Output:

ENAME

CLARK

Problem 4.15:

select max(sal),dname from emp,dept where emp.deptno=dept.deptno and sal > 9000 group by dname;

ENAME

CLARK

Problem 4.16:

select max(sal),dname from emp,dept where emp.deptno=dept.deptno having min(sal)>1000 and min(sal)<5000 group by dname;

Output:

MAX(SAL) DNAME

9850 MAINTAINANCE

9900 MANAGEMENT

Problem 4.17:

create table accdept as select \* from dept where deptno in (10,20,30);

select dept.dname from dept,accdept where dept.deptno=accdept.deptno;

Output:

Table created.

Result Set 50

DNAME

MANAGEMENT

DEVELOPMENT

MAINTAINANCE

Problem 4.18:

select ename from emp where deptno in (select deptno from dept where dname not in (select dept.dname from dept,accdept where dept.deptno=accdept.deptno));

Output:

no data found

Problem 4.19:

select ename,dname from emp left join dept on emp.deptno=dept.deptno;

Output:

ENAME DNAME

SCOTT MANAGEMENT

CLARK MANAGEMENT

SMITH DEVELOPMENT

ASANT DEVELOPMENT

JONES DEVELOPMENT

FORD DEVELOPMENT

ALLEN MAINTAINANCE

WARD MAINTAINANCE

BLAKE MAINTAINANCE

ALLEY MAINTAINANCE

DRANK MAINTAINANCE

Problem 4.20:

select ename,dname from emp right join dept on emp.deptno=dept.deptno;

Output:

ENAME DNAME

SMITH DEVELOPMENT

ASANT DEVELOPMENT

ALLEN MAINTAINANCE

WARD MAINTAINANCE

JONES DEVELOPMENT

BLAKE MAINTAINANCE

SCOTT MANAGEMENT

CLARK MANAGEMENT

FORD DEVELOPMENT

ALLEY MAINTAINANCE

DRANK MAINTAINANCE

- SALES

- TRANSPORT

Problem 4.21:

select ename,dname from emp full outer join dept on emp.deptno=dept.deptno;

Output:

ENAME DNAME

SMITH DEVELOPMENT

ASANT DEVELOPMENT

ALLEN MAINTAINANCE

WARD MAINTAINANCE

JONES DEVELOPMENT

BLAKE MAINTAINANCE

SCOTT MANAGEMENT

CLARK MANAGEMENT

FORD DEVELOPMENT

ALLEY MAINTAINANCE

DRANK MAINTAINANCE

- SALES

- TRANSPORT

Problem 4.22:

select a.ename as employee,b.ename as manager from emp a,emp b where a.mgr=b.empno;

Output:

EMPLOYEE MANAGER

SMITH JONES

ASANT JONES

ALLEN BLAKE

WARD BLAKE

ALLEY BLAKE

DRANK BLAKE

JONES CLARK

BLAKE CLARK

SCOTT CLARK

Problem 4.23:

select a.ename as employee,b.sal as manager\_salary from emp a,emp b where a.mgr=b.empno;

Output:

EMPLOYEE MANAGER\_SALARY

SMITH 5975

ASANT 5975

ALLEN 9850

WARD 9850

ALLEY 9850

DRANK 9850

JONES 9900

BLAKE 9900

SCOTT 9900

Problem 4.24:

select ename,job,empno,dname,loc from emp,dept where emp.deptno=dept.deptno;

Output:

ENAME JOB EMPNO DNAME LOC

SMITH CLERK 7369 DEVELOPMENT MANUFACTURING UNIT

ASANT SALESMAN 7399 DEVELOPMENT MANUFACTURING UNIT

ALLEN SALESMAN 7499 MAINTAINANCE MAIN BLOCK

WARD SALESMAN 7521 MAINTAINANCE MAIN BLOCK

JONES MANAGER 7566 DEVELOPMENT MANUFACTURING UNIT

BLAKE MANAGER 7698 MAINTAINANCE MAIN BLOCK

SCOTT HOD 7611 MANAGEMENT MAIN BLOCK

CLARK CEO 7839 MANAGEMENT MAIN BLOCK

FORD SUPERVIS 7368 DEVELOPMENT MANUFACTURING UNIT

ALLEY SALESMAN 7599 MAINTAINANCE MAIN BLOCK

DRANK CLERCK 7421 MAINTAINANCE MAIN BLOCK

Problem 4.25:

select a.empno,a.ename as employee,a.job,b.ename as manager from emp a,emp b where a.mgr=b.empno;

Output:

EMPNO EMPLOYEE JOB MANAGER

7369 SMITH CLERK JONES

7399 ASANT SALESMAN JONES

7499 ALLEN SALESMAN BLAKE

7521 WARD SALESMAN BLAKE

7599 ALLEY SALESMAN BLAKE

7421 DRANK CLERCK BLAKE

7566 JONES MANAGER CLARK

7698 BLAKE MANAGER CLARK

7611 SCOTT HOD CLARK

Problem 4.26:

select ename from emp where sal in (select sal from emp group by sal having count(\*)>1);

Output:

ENAME

SMITH

ASANT

ALLEN

WARD

FORD

ALLEY

DRANK

Problem 5.1:

select deptno from dept union select deptno from accdept;

Output:

DEPTNO

10

20

30

40

50

Problem 5.2:

select deptno from dept union all select deptno from accdept;

Output:

DEPTNO

10

20

30

40

50

10

20

30

Problem 5.3:

select deptno from dept intersect select deptno from accdept;

Output:

DEPTNO

10

20

30

Problem 5.4:

select deptno from dept minus select deptno from accdept;

Output:

DEPTNO

40

50

Problem 5.5:

create view managers as select \* from emp where job='MANAGER';

Output:

View created.

Problem 5.6:

create view general as select empno,ename,emp.deptno,dname from emp,dept where emp.deptno=dept.deptno;

Output:

View created.

Problem 5.7:

create view alll as select empno,ename,emp.deptno,dname from emp,dept where emp.deptno=dept.deptno and job not in ('HOD','CEO');

Output:

View created.

Problem 5.8:

select view\_name from user\_views;

Output:

VIEW\_NAME

ALLL

GENERAL

MANAGERS

Problem 5.9:

select \* from manager;

select ename from general;

Output:

EMPNO ENAME JOB MGR DEPTNO SAL COMMISSION DOB

7566 JONES MANAGER 7839 20 5975 1000 02-APR-81

7698 BLAKE MANAGER 7839 30 9850 1000 01-MAY-79

Problem 5.10:

drop view alll;

Output:

View dropped.

Problem 6.1:

declare

num1 number;

num2 number;

temp number;

begin

num1:=1000;

num2:=2000;

dbms\_output.put\_line('before');

dbms\_output.put\_line('num1 = '|| num1 ||' num2 = '|| num2);

temp := num1;

num1 := num2;

num2 := temp;

dbms\_output.put\_line('after');

dbms\_output.put\_line('num1 = '|| num1 ||' num2 = '|| num2);

end;

Output:

before

num1 = 1000 num2 = 2000

after

num1 = 2000 num2 = 1000

Problem 6.2:

declare

num1 number;

num2 number;

temp number;

begin

num1:=1000;

num2:=2000;

dbms\_output.put\_line('before');

dbms\_output.put\_line('num1 = '|| num1 ||' num2 = '|| num2);

temp := num1;

num1 := num2;

num2 := temp;

dbms\_output.put\_line('after');

dbms\_output.put\_line('num1 = '|| num1 ||' num2 = '|| num2);

end;

Output:

before

num1 = 1000 num2 = 2000

after

num1 = 2000 num2 = 1000

Problem 6.3:

DECLARE

a NUMBER := 46;

b NUMBER := 67;

BEGIN

IF a > b THEN

dbms\_output.Put\_line('Greatest number is a'

||a);

ELSIF b > a THEN

dbms\_output.Put\_line('Greatest number is b'

||b);

END IF;

END;

Output:

Greatest number is a 67

Problem 6.4:

DECLARE

a NUMBER := 89;

k NUMBER := 78;

c NUMBER := 90;

d NUMBER := 67;

e NUMBER := 75;

f NUMBER := 79;

sumof NUMBER;

avgof NUMBER;

BEGIN

sumof := a + k + c + d + e + f;

avgof := sumof / 6;

dbms\_output.Put\_line('Sum = ' ||sumof);

dbms\_output.Put\_line('Average = ' ||avgof);

IF sumof > 500 THEN

dbms\_output.Put\_line('Grade = A');

ELSIF sumof > 400 THEN

dbms\_output.Put\_line('Grade = B');

ELSIF sumof > 300 THEN

dbms\_output.Put\_line('Grade = C');

ELSE

dbms\_output.Put\_line('Grade = F');

END IF;

END;

Output:

Sum = 478

Average = 79.66666666666666666666666666666666666667

Grade = B

Problem 6.5:

DECLARE

n INTEGER;

temp\_sum INTEGER;

r INTEGER;

BEGIN

n := 67344;

temp\_sum := 0;

WHILE n <> 0 LOOP

r := MOD(n, 10);

temp\_sum := temp\_sum + r;

n := Trunc(n / 10);

END LOOP;

dbms\_output.Put\_line('sum of digits = ' || temp\_sum);

END;

Output:

sum of digits = 24

Problem 6.6:

DECLARE

num NUMBER;

rev NUMBER;

BEGIN

num:= 12345;

rev:=0;

WHILE num>0 LOOP

rev:=(rev\*10) + mod(num,10);

num:=floor(num/10);

END LOOP;

DBMS\_OUTPUT.PUT\_LINE('Reverse of the number is: ' || rev);

END;

Output:

Reverse of the number is: 54321

Problem 6.7:

declare

n number;

i number;

temp number;

begin

n := 89;

i := 2;

temp := 1;

for i in 2..n/2

loop

if mod(n, i) = 0

then

temp := 0;

exit;

end if;

end loop;

if temp = 1

then

dbms\_output.put\_line('This number is a prime number');

else

dbms\_output.put\_line('Not a prime number');

end if;

end;

Output:

This number is a prime number

Problem 6.8:

declare

fac number :=1;

n number := 8;

begin

while n > 0 loop

fac:=n\*fac;

n:=n-1;

end loop;

dbms\_output.put\_line(fac);

end;

Output:

40320

Problem 6.9:

DECLARE

area NUMBER(6, 2) ;

radius NUMBER(1) := 5;

pi CONSTANT NUMBER(3, 2) := 3.14;

BEGIN

area := pi \* radius \* radius;

dbms\_output.Put\_line('Area = ' || area);

END;

Output:

Area = 78.5

Problem 6.10:

create table acct(name varchar2(10),cur\_bal number(10),acctno number(6,2));

insert into acct values('sirius',10000,777);

insert into acct values('john',1000,765);

insert into acct values('sam',500,855);

insert into acct values('peter',800,353);

DECLARE

ACCTNO INTEGER;

BEGIN

ACCTNO:=&ACCTNO;

UPDATE ACCT SET CUR\_BAL=CUR\_BAL-100 WHERE CUR\_BAL<2000 AND ACCTNO=ACCTNO;

END;

Output:

NAME CUR\_BAL ACCTNO

sirius 10000 777

john 700 765

sam 200 855

peter 500 353

sirius 10000 777

john 800 765

sam 300 855

peter 600 353

sirius 10000 777

john 700 765

sam 200 855

peter 500 353

Exercise 7:

Problem7.1 :-

create or replace procedure amount(amt) as

begin

update emp set salary = salary + 1000 where salaray > 5000 or deptno = 20;

end;

/

exec ammount(5000)

Problem 7.2 :-

create or replace procedure salary(empid number) as

begin

update emp set sal=sal+sal\*(0.1) where empno=empid;

end;

/

exec salary(7521);

Problem 7.3 :-

create or replace procedure get\_sal(dept number) as

begin

for s in (select \* from emp where deptno = dept)

loop

dbms\_output.put\_line(s.sal);

end loop;

end;

/

exec get\_sal(20);

Problem 7.4 :-

create or replace procedure get\_nature(dept number) as

begin

for s in (select \* from emp where deptno = dept)

loop

dbms\_output.put\_line(s.job);

end loop;

end;

/

exec get\_nature(20);

Problem 7.5 :-

create or replace procedure dep\_name(dept number)

as

begin

select dept.dname from dept,emp where emp.deptno=dept.deptno;

end;

/

exec dep\_name(30);

8. Triggers

8.1

CREATE OR RELPLACE TRIGGER trig1 before insert on DEPT for each row DECLARE a number;

BEGIN

if(:new.DEPTNO is Null) then

raise\_application\_error(-20001,'error:: DEPTNO cannot be null');

else

select count(\*) into a from DEPT where DEPTNO =:new.DEPTNO;

if(a=1) then

raise\_application\_error(-20002,'error:: cannot have duplicate DEPTNo ');

end if;

end if;

END;

8.2

CREATE [OR REPLACE] TRIGGER trig2 After delete on DEPT FOR EACH ROW

BEGIN

DELETE FROM emp WHERE emp.deptno=:new.deptno;

END;

8.3

CREATE TRIGGER trig3 AFTER DELETE ON emp FOR EACH ROW

BEGIN

INSERT INTO log(val1, val2, ...) VALUES (old.val1, old.val2, ...);

END;