1. Display salary,mgr, name and remark for employee whose employee number is given

```
Delimiter //
Create procedure getdata(in pempno int)
Begin
declare vsal decimal(9,2);
declare vmgr int;
declare vename varchar(20);
declare vremark varchar(20);
select sal,mgr,ename into vsal,vmgr,vename
from emp
where empno=pempno;
if vsal < 1500 then
  set vremark='smaller';
elseif vsal<2000 then
  set vremark='uptodate';
else
  set vremark='greater';
end if;
select vsal,vename,vmgr,vremark;
End//
```

2. Wrtite procedure to find deptno , mgr, job and mgrname
   If mgr=7902 the mgrname is ‘known manager’ otherwise display ‘unknown manager’

```
delimiter //
Create procedure findmgr(eno int)
Begin
Declare vmgrname varchar(20);
Declare vmgr, vdeptno int;
Declare vjob varchar(20);
Select mgr,deptno,job  into vmgr,vdeptno,vjob
From emp
Where empno=eno;
If vmgr=7902 then
    Set vmgrname = 'known manager';
else
    Set vmgrname = 'unknown manager';
End if;
Select vdeptno,vmgr,vjob,vmgrname;
End//
delimiter ;
```

using while loop
syntax

While loop----------

```
WHILE expression DO
  statements
END WHILE
```

Example ----

```
delimiter //

create procedure generatestr(in pcnt int)
begin
 declare vstr varchar(50) default '';
 declare vn int;
 set vn=1;
 while vn<=pcnt do
        set vstr=concat(vstr,vn,',');
        set vn=vn+1;

 end while;
 select vstr;
end//
delimiter ;
```

Repeat loop syntax

```
   REPEAT
        statements;
   UNTIL expression
 END REPEAT
```

```
create procedure generate_repeat(in pcnt int)

begin

 declare vstr varchar(50) default '';

 declare vn int;

 set vn=1;

repeat

        set vstr=concat(vstr,vn,',');

        set vn=vn+1;

  until vn > pcnt

 end repeat;

 select vstr;

end//
```

loop--- end loop leave iterate

```
delimiter //
create procedure generate_loop(in pcnt int)
begin
  declare vstr varchar(50) default '';
  declare vn int default 1;
   label1:loop
    set vstr=concat(vstr,vn,',');
    set vn=vn+1;
    if vn>pcnt then
        leave label1;
    end if;
  end loop;
  select vstr;

end//
delimiter ;
```

3. Write a procedure to find factorial of a number

```
Create procedure factorial(in num int)
Begin
Declare fact int;
Set fact=1;
While num > 0 do
   Set fact=fact*num;
   Set num=num-1;
End while;
Select fact;
End//
```

4. Write a procedure to find factorial of a number using reapet – until loop

```
Create procedure factorial_repeat(in num int)
Begin
Declare fact int;
Set fact=1;
repeat
   Set fact=fact*num;
   Set num=num-1;
```

```
    Until num <= 0
    End repeat;
    Select fact;
    End//
```

5. Write a procedure to find factorial of a number using loop-end loop

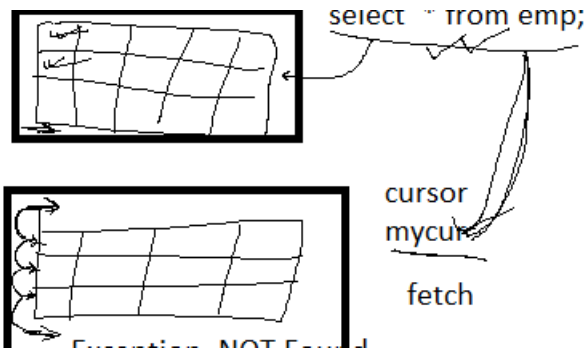
```
Create procedure factorial_loop (in num int)
Begin
Declare fact int;
Set fact=1;
label1:loop
   Set fact=fact*num;
   Set num=num-1;
   If num > 0 then
        Iterate label1;
  Else
       Leave label1
 End if;
End loop
Select fact;
End//
```

6. Write a procedure which accepts a number and display table of the number

```
Create procedure showtable(in num int)
Begin
Declare res int default 1;
Declare iter int default 1;
While iter <=10 do
    Set res=num*iter;
    Set iter=iter+1;
   Select res;
end while;
End//
```

Cursors in database

When select statement returns multiple rows and if you want to traverse through those rows one by one then use cursors.



Steps to use the cursor

1. Declare cursor and bind it with one query
   Declare empcur cursor for select empno,ename,sal from emp;
   Declare continue handler for NOTFOUND set vset=1;
2. Open cursor
   Open empcur;
3. Fetch the row
   Fetch empcur into vempno,vename,vsal
4. Check whether found ---- with the help[of NOT FOUND exception
   If vset=1 then
      leave label1
   End if;
5. If not found then stop the loop, then close cursor
6. Otherwise process data
   Select vempno,vename,vsal

7. repeat steps 3,4 and 5

```
delimiter //

create procedure displayallemp()

begin

  declare vset int default 0;

  declare vempno int;

  declare vename varchar(30);

  declare vsal decimal(9,2);

  declare empcur cursor for select empno,ename,sal from emp;

  declare continue handler for NOT FOUND set vset=1;
```

```
  open empcur;
  label1:loop
  fetch empcur into vempno,vename,vsal;
  if vset=1 then
    leave label1;
  end if;
  select vempno,vename,vsal;
  end loop;
  close empcur;
end//
delimiter ;
```

3. generate a comma separated list of all enames and jobs

SMITH----CLERK,JONES---ANALYST,JOHN----MANAGER,……..

```
Create procedure genartejoblist()
begin
  declare vset int default 0;
  declare vename,vjob varchar(30);
  declare vstr varchar(500) default '';
  declare empcur cursor for select ename,job from emp;
  declare continue handler for NOT FOUND set vset=1;
  open empcur;
  label1:loop
  fetch empcur into vename,vjob;
  if vset=1 then
    leave label1;
  end if;
  set vstr=concat(vstr,vename,'----',vjob,',');
```

```
  end loop;
  select vstr;
  close empcur;
end//
delimiter ;
```