CURSOR PROGRAM

AIM: Write a PL/SQL block to display total salary of all employees using cursor.

ALGORITHM:

Step1: Start
Step2: declare the variables n1(empno),sl(sal),na(empname),com(comm) of %type
Step3: Initialize the cursor c1 by selecting empno,empname,sal,comm from emp.
Step4: open the cursor c1
Step5: fetch the values of n1,na,sl,com into cursor c1.
Step6: calculate ts = sl + com
Step7: print the values of n1,na,ts
Step8: close the cursor c1
Step9: Stop

PROGRAM:

```
declare
n1 emp.empno%type;
sl emp.sal%type;
na emp.empname%type;
com emp.comm%type;
cursor c1 is select empno, empname, sal, comm from emp;
ts number(8,2);
begin
open c1;
dbms_output.put_line('……..');
loop
fetch c1 into n1,na,sl,com;
exit when (c1%notfound);
ts:=sl+nvl(com,0);
dbms_output.put_line('empno'|| to_char(n1));
dbms_output.put_line('name '||na);
dbms_output.put_line('total salary'|| to_char(ts));
dbms_output.put_line('……..');
end loop;
close c1;
end;
```

OUTPUT

EMPNO 1111

NAME AISHWARYA

TOTAL SALARY 5300.5

……

EMPNO 1112

NAME EISHA

TOTAL SALARY 6772.5

……

EMPNO 1113

NAME NASHA

TOTAL SALARY 15300.5

……

EMPNO 1114

NAME ABHIJEETH

TOTAL SALARY 8307.5

……

CAR DATABASE APPLICATION

AIM: 1.Create the following database for an application and insert values to it.

car(serialno,model,maufacturer,price)

options(serialno,optionname,price)

sales(salespersonid,serialno,date,salesprice)

salesperson(salespersonid,name,phone)

populate the database with data

2. Do the following using PL/SQL

a) Create a trigger that prints the change in price everytime the price of the car is changed.

b) For the salesperson named joe, list the following information for all the cars he has sold: serial number, manufacturer, salesprice

c) List the serial number, model no. of cars that have no options.

ALGORITHM:

Step 1: Start

Step 2: Create a table Car, Options, Sales, Salesperson.

Step 3: Populate the tables with data.

Step 4: Create a trigger named sellprice before update operation on car table for each row.

a. Declare a variable f of number type.

b. Check the if condition for Non-equality of old and new values of the field price.

c. Store the difference of the field price in f.

d.Print the value of f.

Step 5: Initliaze a cursor named scursor for storing the value of the field serialno, manufacturer, salesprice from car table, sales table, salesperson table based on a condition.

a. The condition should satisfy that the salespersonid from the sales table and salesperson should be alike,salesperson name should be 'joe' and serialno from car and sales table should also be same.

b. print the value of serialno, manufacturer and salesprice.

Step 6: Create a cursor named scursor for storing the fields serialno, model from the table car where serialno is not in options.

a. print the values of serialno and model form the sval obtained from scursor.

Step 7: Stop

Creation and Insertion on car database

```
SQL>create table car (serialno number(6) primary key,
model varchar2(10),manufacturer varchar2(10),
price number(10));

Table created.

SQL>create table options(serialno references car(serialno),
optionname varchar(10),price number(10));

Table created.

SQL>create table salesperson(salespersonid varchar(10) primary key,
name varchar(20),phone number(10));
Table created.


SQL>create table sales(salespersonid varchar(10) references salesperson(salespersonid),
```

serialno references car(serialno),sdate date,salesprice number(10));

Table created.

SQL>insert into car values(100001,'Alto','Maruthi',350025);
1 row created

SQL>insert into car values(100002,'WagonR','Maruthi',401493);
1 row created

SQL>insert into car values(100003,'Swift','Maruthi',783403);
1 row created

SQL>insert into options values(100002,'Lxi',401493);
1 row created

SQL>insert into options values(100002,'Vxi',451493);
1 row created

SQL>insert into salesperson values('S1009','Joe',9995555555);
1 row created

SQL>insert into salesperson values('S1010','Manoj',9995555556);
1 row created

SQL>insert into sales values('S1010',100002,'12-May-2012',401493);
1 row created

SQL>insert into sales values('S1009',100002,'12-May-2012',451493);
1 row created

1. Create a trigger that prints the change in price everytime the price of the car is changed.

```
SQL>create or replace trigger sellprice
before update on car
FOR EACH ROW
declare
f number(10);
begin
if :old.price <> :new.price then
f:=:new.price - :old.price;
dbms_output.put_line('Change in price = '||f);
end if;
end;
/
```
Trigger created.

2. For the salesperson named joe,list the following information for all the cars he has sold:serial number,manufacturer,salesprice

```
SQL>declare
cursor scursor is  select s.serialno,manufacturer,salesprice from car c,sales s, salesperson sp where
 s.salespersonid=sp.salespersonid and sp.name='Joe'and s.serialno=c.serialno;
begin
for sval in scursor
loop
dbms_output.put_line(sval.serialno||' '||sval.manufacturer||' '||sval.salesprice);
end loop;
end;
/
```

3. List the serial number,model no. of cars that have no options.

```
SQL>declare
cursor scursor
is select serialno,model from car
where serialno not in (select serialno from options);
begin
for sval in scursor
loop
dbms_output.put_line(sval.serialno||' '||sval.model);
end loop;
end;
/
```

OUTPUT

Ans 1

SQL> update car set price=350050 where serialno=100001;

Change in price = 25

1 row updated.

Ans 2

SQL> 100002 Maruthi 451493

PL/SQL procedure successfully completed.

Ans 3

SQL> 100001 Alto
100003 Swift

PL/SQL procedure successfully completed.