SLIP-1

Q3. Consider the following entities and their relationships.
Client (client_no, client_name, address, birthdate)
Policy_info (policy_no, desc, maturity_amt, prem_amt, date)
Relation between Client and Policy_info is Many to Many
Constraint: Primary key, prem_amt and maturity_amt should be > 0.
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will return total maturity amount of policies of a particular client.

SQL Plus

```
SQL> select * from client2;

       CNO CNAME           ADDRESS              BIRTHDATE
---------- --------------- -------------------- ----------
         1 Ashish          Pune                 20may
         2 Bhushan         Pune                 23jan
         3 Satyajit        Pune                 12mar

SQL> select * from policy_info;

       PNO DECB             MAMT       PAMT PDATE
---------- ---------- ---------- ---------- ---------------
         1 M-term            800        600 20may
         2 S-term           1000        700 23jan
         3 L-term           1200        400 12mar

SQL>
SQL>
SQL> set serveroutput on
SQL> create or replace function f15(abc in varchar) return number as xyz number;
  2  begin
  3  select sum(policy_info.mamt)into xyz from client2,policy_info,client_poly where
client2.Cno=client_poly.Cno and policy_info.pno=client_poly.pno and cname='Ashish';
  4  if sql% found then
  5  return(xyz);
  6  else
  7  return null;
  8  end if;
  9  end f15;
 10  /

Function created.

SQL> begin
  2  dbms_output.put_line('amt-'||f15('Ashish'));
  3  end;
  4  /
amt-800

PL/SQL procedure successfully completed.
```

2.Write a cursor which will display policy date wise client details.

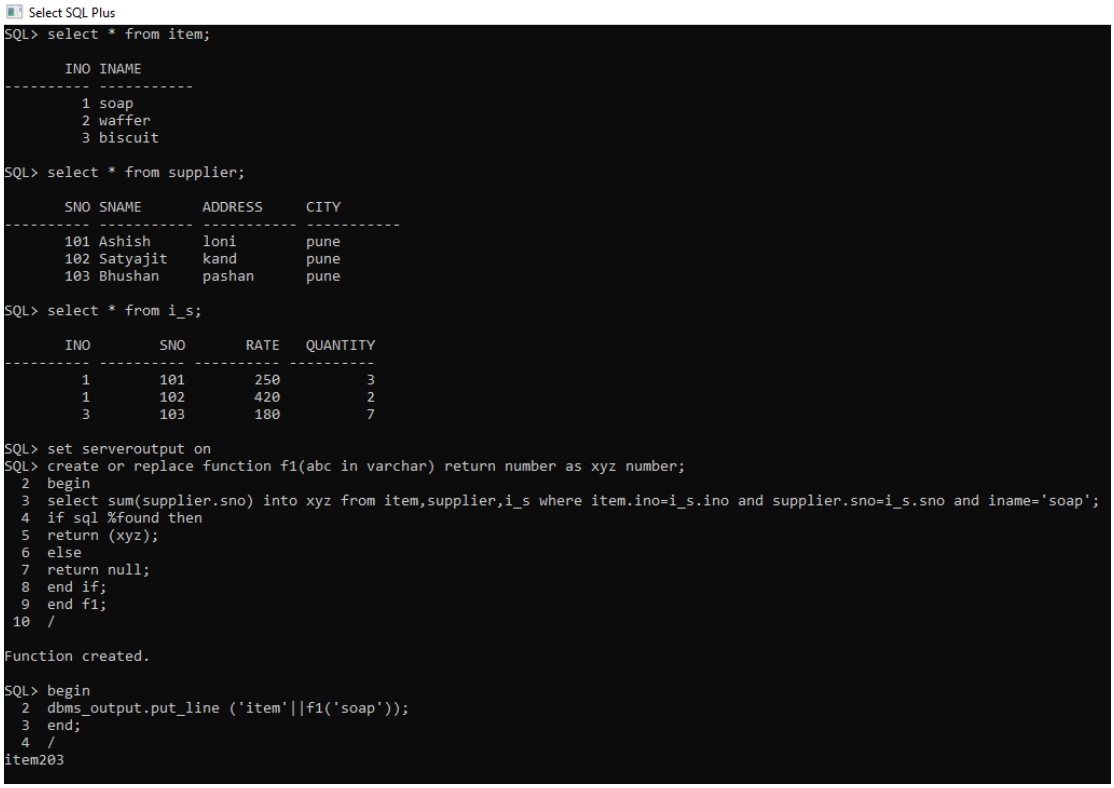
SQL Plus

```
SQL> set serveroutput on
SQL> declare
  2  cursor c1 is select  cname, address,pdate from client1,poly,cp
 where client1.cno=cp.cno and   poly.pno=cp.pno order by pdate;
  3  c c1%rowtype;
  4
  5  begin
  6  open c1;
  7  loop
  8  fetch c1 into c;
  9  exit when c1%notfound;
 10  dbms_output.put_line(c.cname||''||c.address||''||c.pdate);
 11  end loop;
 12  close c1;
 13  end;
 14  /
shreepune23jan

PL/SQL procedure successfully completed.

SQL>
```

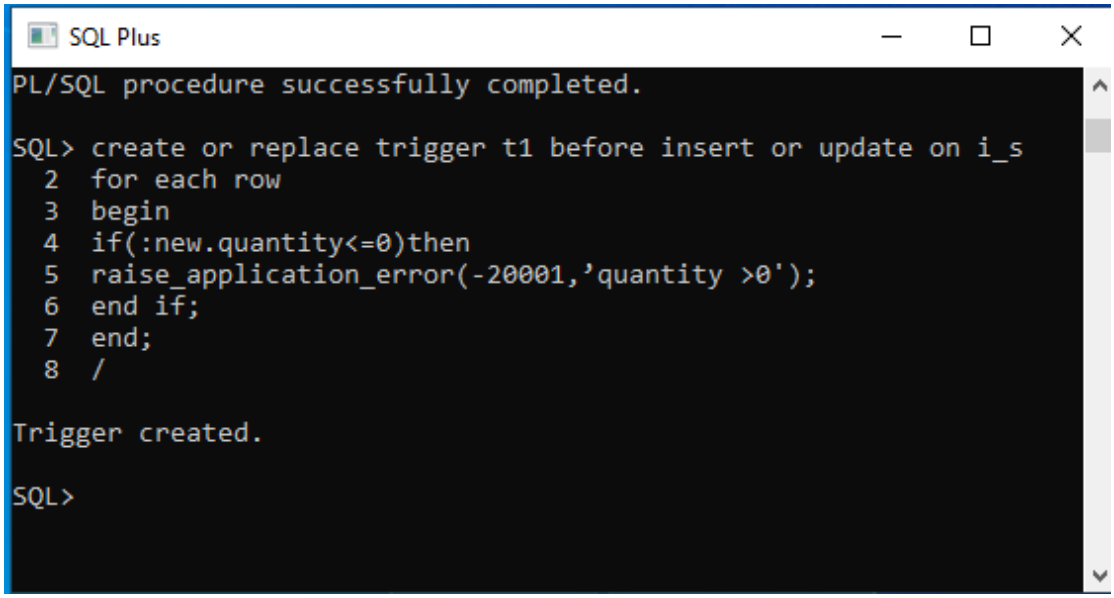
SLIP-2

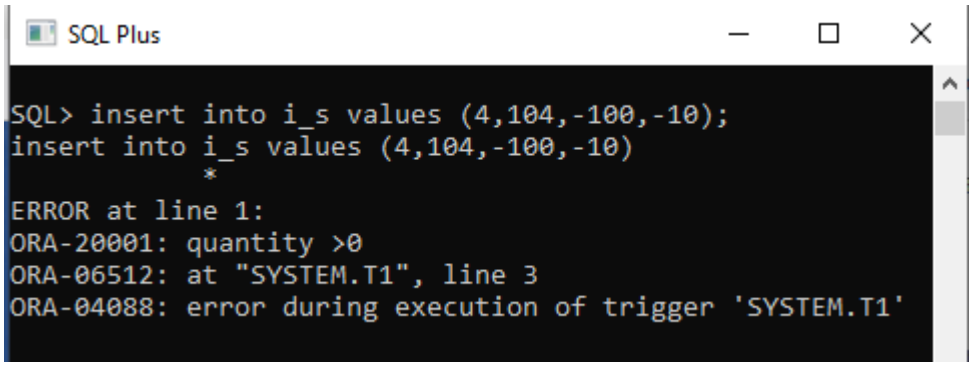
Q3. Consider the following Item_Supplier database
Item (itemno, itemname)
Supplier (supplier_No , supplier_name, address, city)
Relationship between Item and Supplier is many-to-many with descriptive attribute
rate and quantity
Constraints: itemno ,supplier_No primary key
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write function to print the total number of suppliers of a particular item.



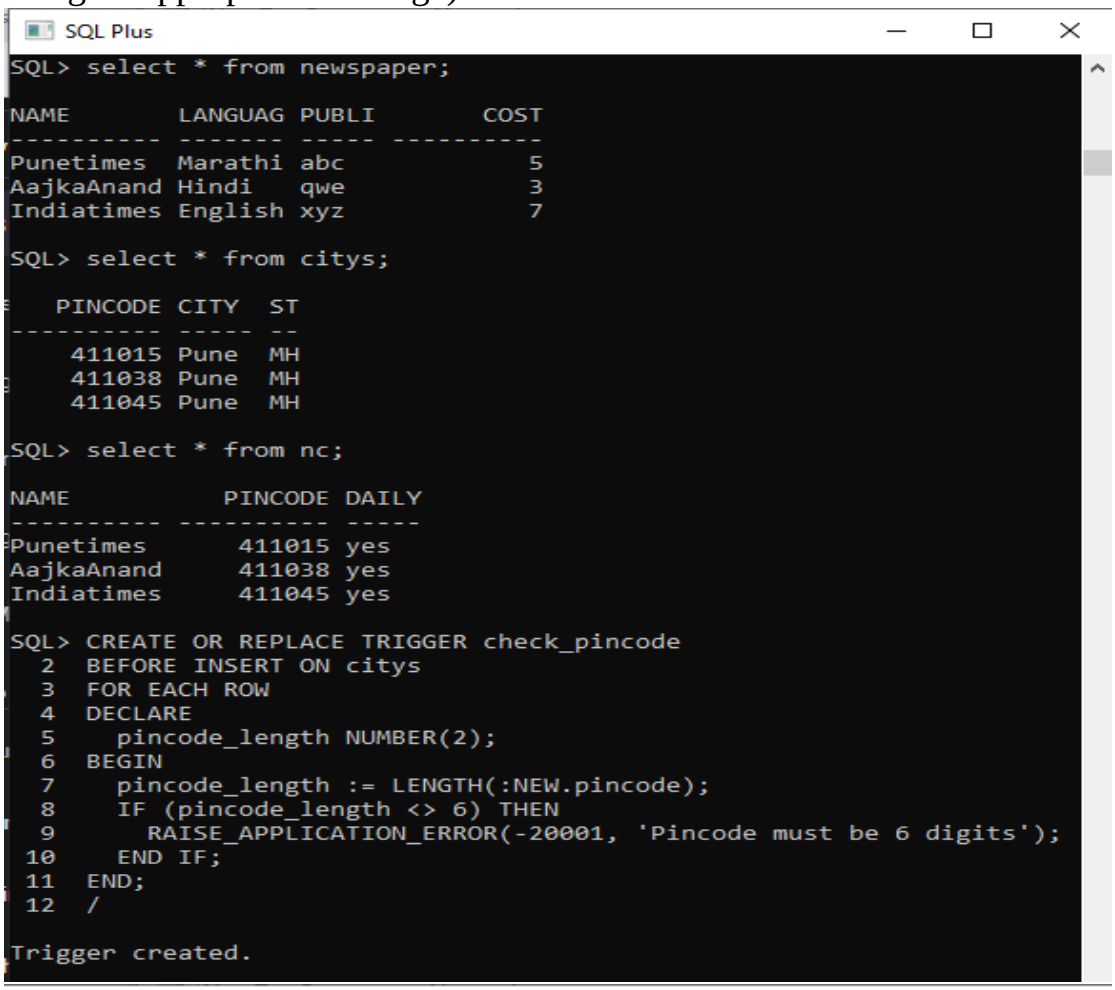
2. Write a trigger which will fire before insert or update on rate and quantity less than or equal to zero. (Raise user defined exception and give appropriate message)

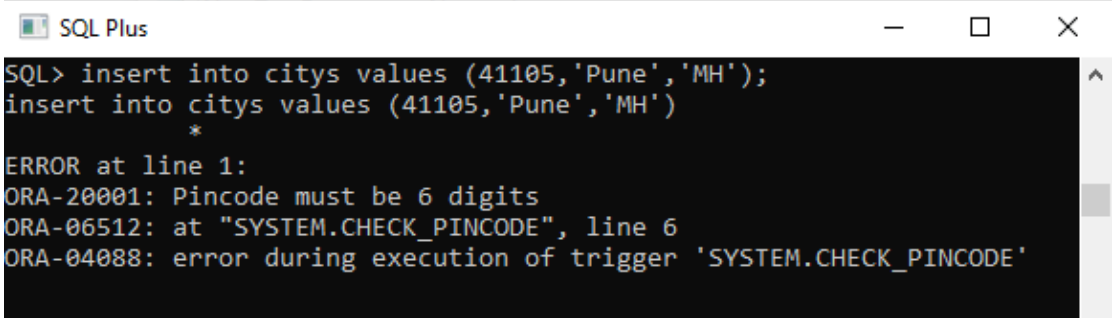




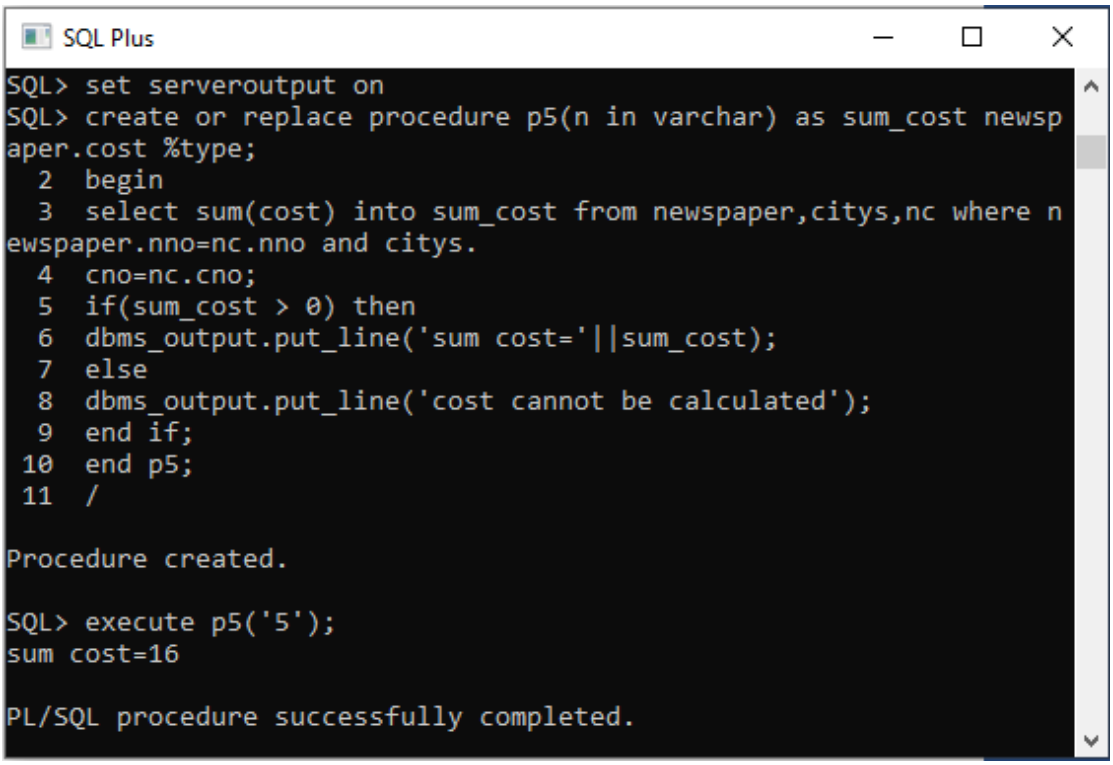
SLIP-3

Q3. Consider the following entities and their relationship. [40]
Newspaper (name,language , publisher , cost)
Cities (pincode , city, state)
Relationship between Newspaper and Cities is many-to-many with descriptive attribute daily required
Constraints: name and pincode primary key
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:
1)Write a trigger which will fire before insert on the cities table which check that the pincode must be of 6 digit. (Raise user defined exception and give appropriate message).





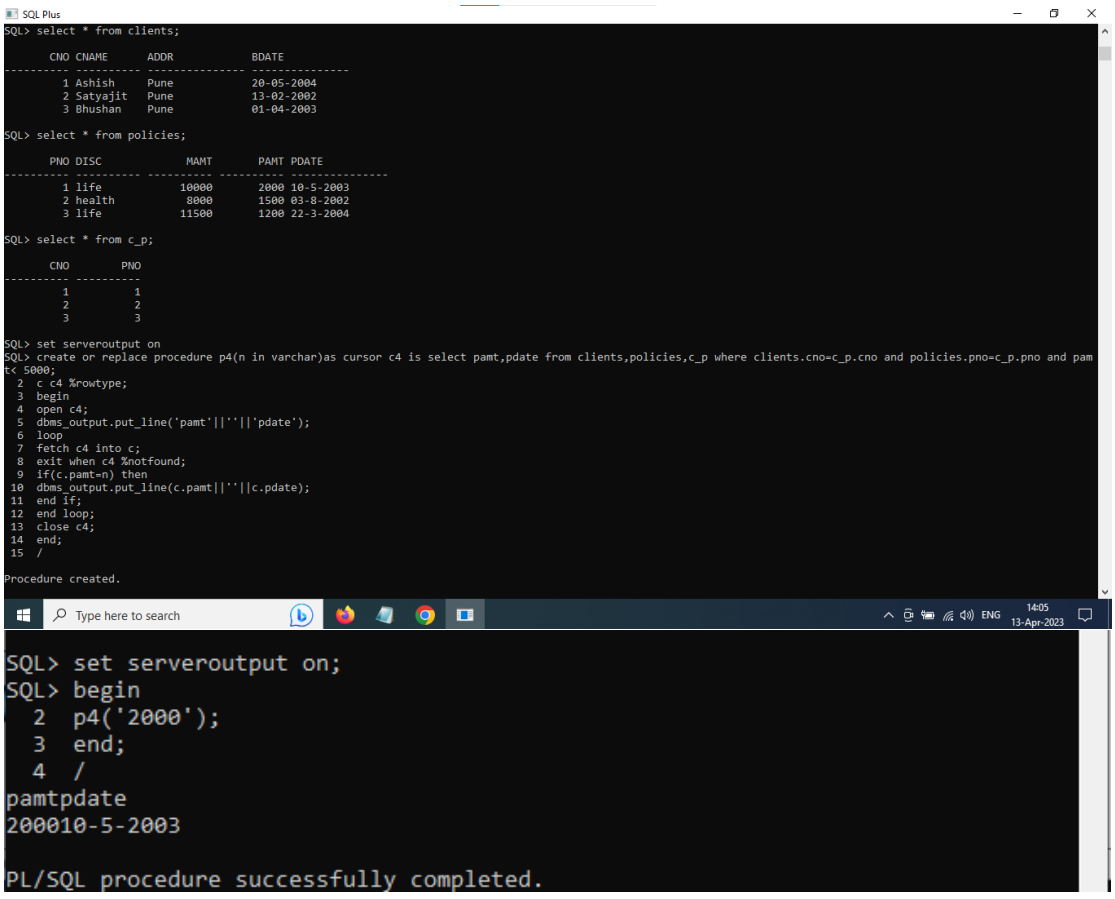
2) Write a procedure to calculate city wise total cost of each newspaper



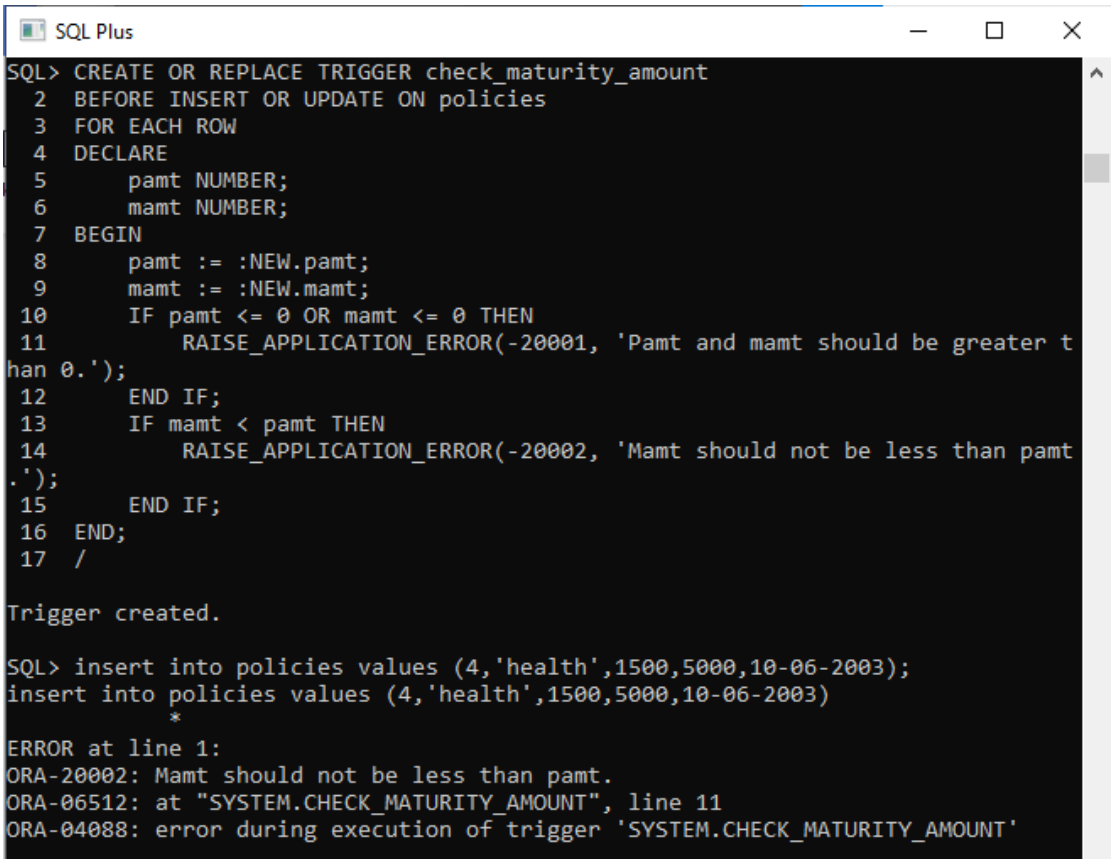
SLIP-4

Q3 Consider the following entities and their relationships. **[40]**
Client (client_no, client_name, address, birthdate)
Policy_info (policy_no, desc, maturity_amt, prem_amt, date)
Relation between Client and Policy_info is Many to Many
Constraint: Primary key, prem_amt and maturity_amt should be > 0.
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure which will display all policy details having premium amount less than
5000.



2) Write a trigger which will fire before insert or update on policy_info having maturity amount less than premium amount. (Raise user defined exception and give appropriate message).



SLIP-5

Q3 Consider the following entities and their relationships. [40]
Library(Lno, Lname, Location, Librarian, no_of_books)
Book(Bid, Bname, Author_Name, Price, publication)
Relation between Library and Book is one to many.
Constraint: Primary key, Price should not be null.

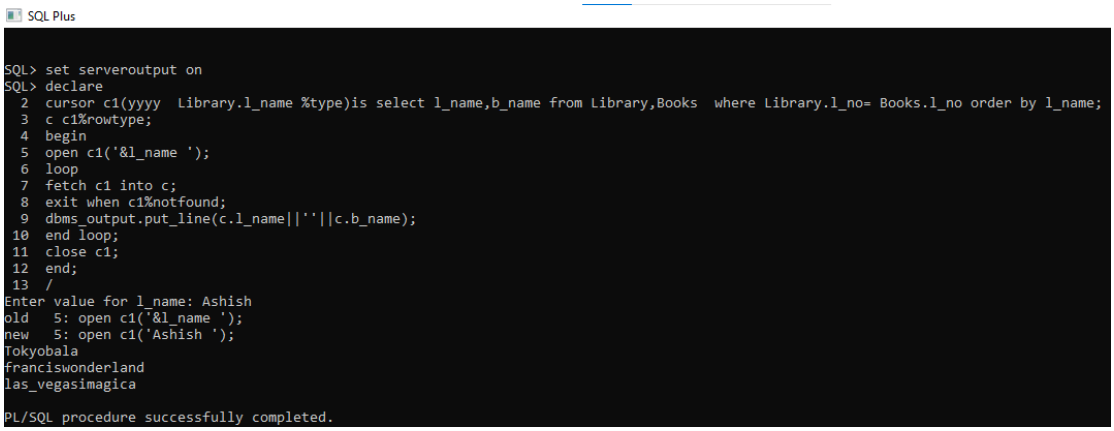
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will accept publication name from user and display total price of books of that publication.

```
SQL Plus
SQL> select * from library;

      L_NO L_NAME               LOCATION             LIBRARIAN
---------- -------------------- -------------------- --------------------
NO_OF_BOOK
----------
         1 francis              pune                 Ashish
        10

         2 las_vegas            pune                 Bhushan
         7

         3 Tokyo                pune                 Satyajit
         5


SQL> select * from books;

      B_ID B_NAME               AUTHOR_NAME               PRICE
---------- -------------------- -------------------- ----------
PUBLICATION               L_NO
-------------------- ----------
         1 wonderland           alice                      520
nirali                        1

         2 imagica              smile                      450
S_chand                       2

         3 bala                 slice                      370
Mathew                        3


SQL> set serveroutput on;
SQL> create or replace function fun1(pn in varchar) return number as pm number;
  2  begin
  3  select sum(books.price) into pm from library,books where library.l_no=books.l_no and publication='vision';
  4  if sql %found then
  5  return(pm);
  6  else
  7  return null;
  8  end if;
  9  end;
 10  /
```

```
SQL Plus

Function created.

SQL> begin
  2  dbms_output.put_line('price-'||fun5('nirali'));
  3  end;
  4  /
price-520

PL/SQL procedure successfully completed.
```

2) Write a cursor which will display library wise book details.(Use Parameterized Cursor)

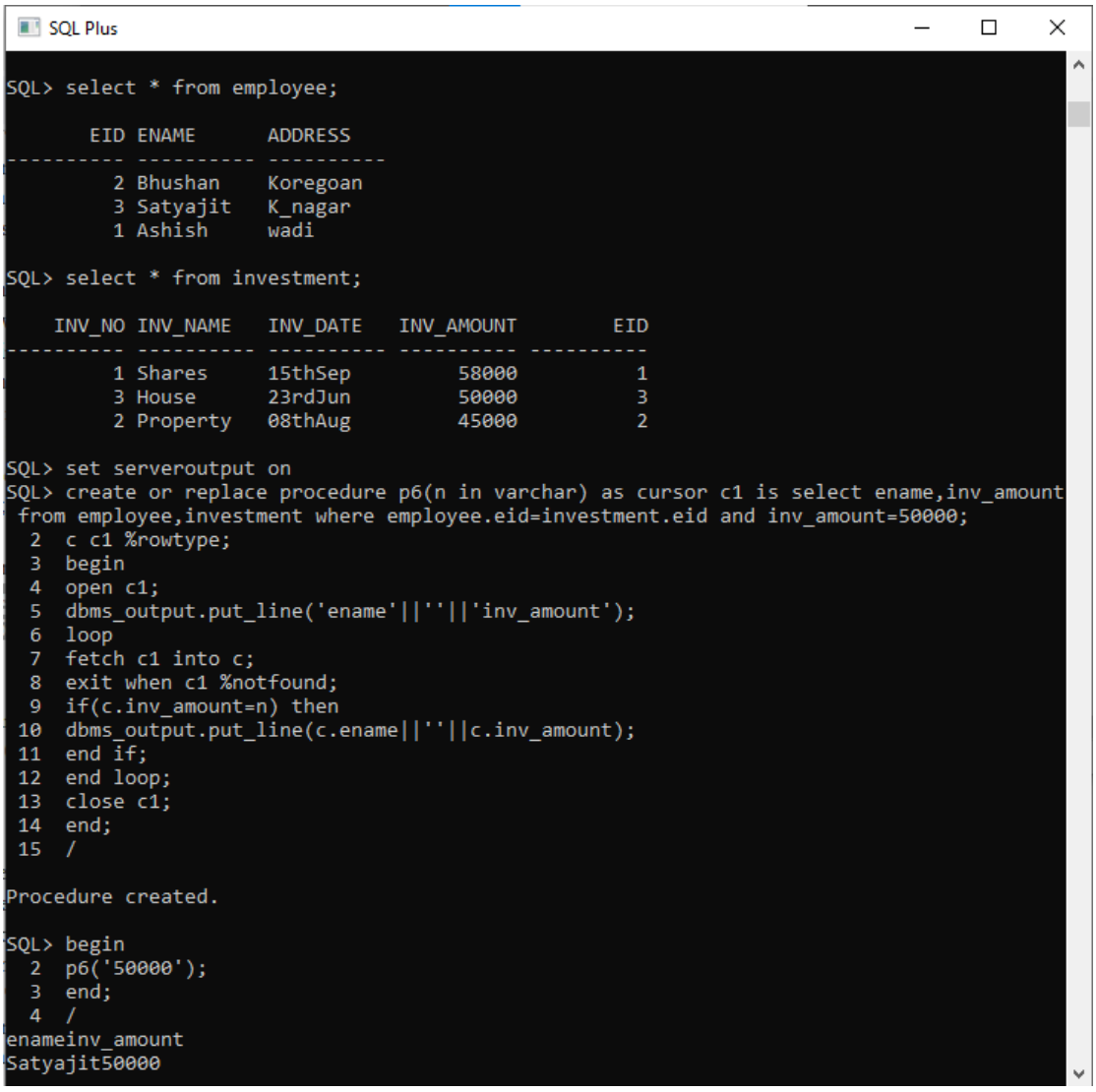


SLIP-6

Q3 Consider the following entities and their relationships. [40]
Employee (emp_id, emp_name, address)
Investment (inv_no, inv_name, inv_date, inv_amount)
Relation between Employee and Investment is One to Many.
Constraint: Primary key, inv_amount should be > 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure which will display details of employees invested amount in “Mutual Fund



2) Write a cursor which will display date wise investment details.

SLIP-7

Q3 Consider the following entities and their relationships. [40]
Bill (billno, day, tableno, total)
Menu (dish_no, dish_desc, price)
The relationship between Bill and Menu is Many to Many with quantity as descriptive attribute.
Constraint: Primary key, price should be > 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure to display menu details having price between 200 to 500 which were order on 'Saturday' .

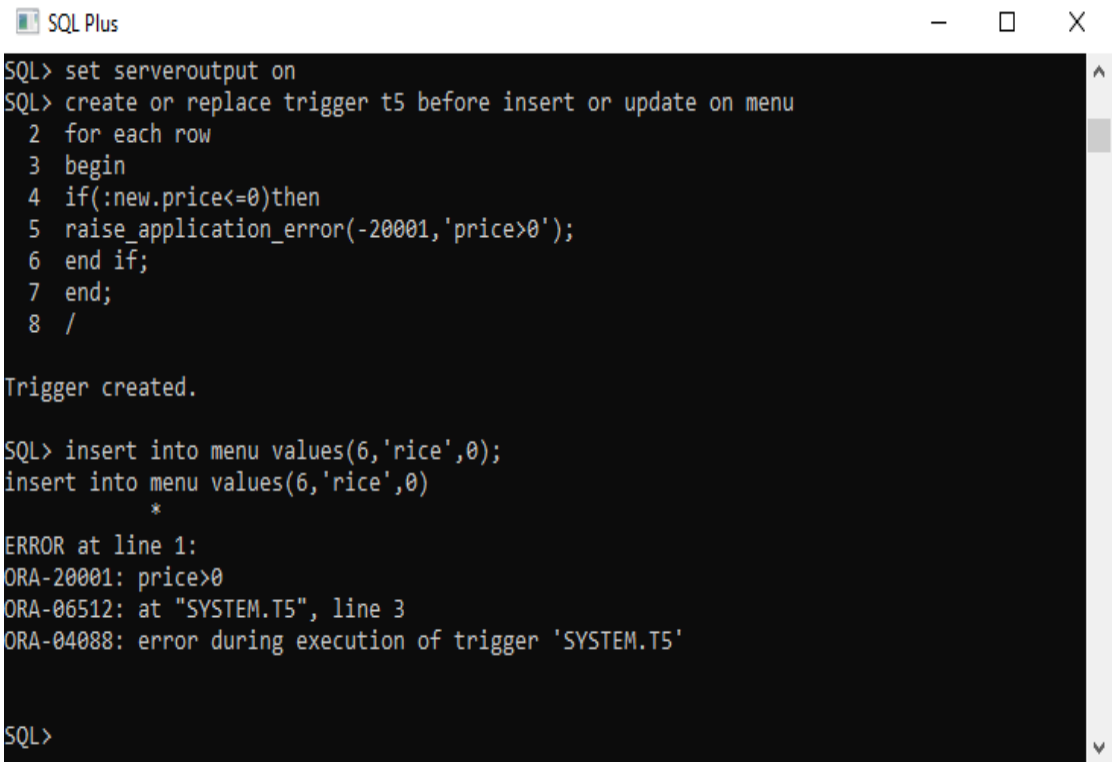
SQL Plus

```
SQL> select * from bill;

   BILL_NO DAY           TABLE_NO       TOTAL
---------- ---------- ---------- ----------
         1 saturday          101        240
         2 Monday            102        280
         3 Wednesday         103        200

SQL> select * from menu;

   DISH_NO DISH_DESCR       PRICE
---------- ---------- ----------
         1 paneer             200
         2 Shurma             320
         3 p_handi            420

SQL> set serveroutput on;
SQL> create or replace procedure p1(a in varchar) as cursor
c1 is select menu.dish_no,menu.price,bill.day from bill,menu
,bm where bill.bill_no=bm.bill_no and menu.dish_no=bm.dish_n
o and price between 200 and 500 and day='saturday';
  2  c c1 %rowtype;
  3  begin
  4  open c1;
  5  dbms_output.put_line('dish_no'||''||'price'||''||'day')
;
  6  loop
  7  fetch c1 into c;
  8  exit when c1 %notfound;
  9  if(c.day=a)then
 10  dbms_output.put_line(c.dish_no||''||c.price||''||c.day)
;
 11  end if;
 12  end loop;
 13  close c1;
 14  end;
 15  /

Procedure created.
```

SQL Plus

```
SQL> begin
  2  p1('saturday');
  3  end;
  4  /
dish_nopriceday
1200saturday

PL/SQL procedure successfully completed.
```

2) Write a trigger which will fire before insert or update on Menu having price less than or equal to zero. (Raise user defined exception and give appropriate message)

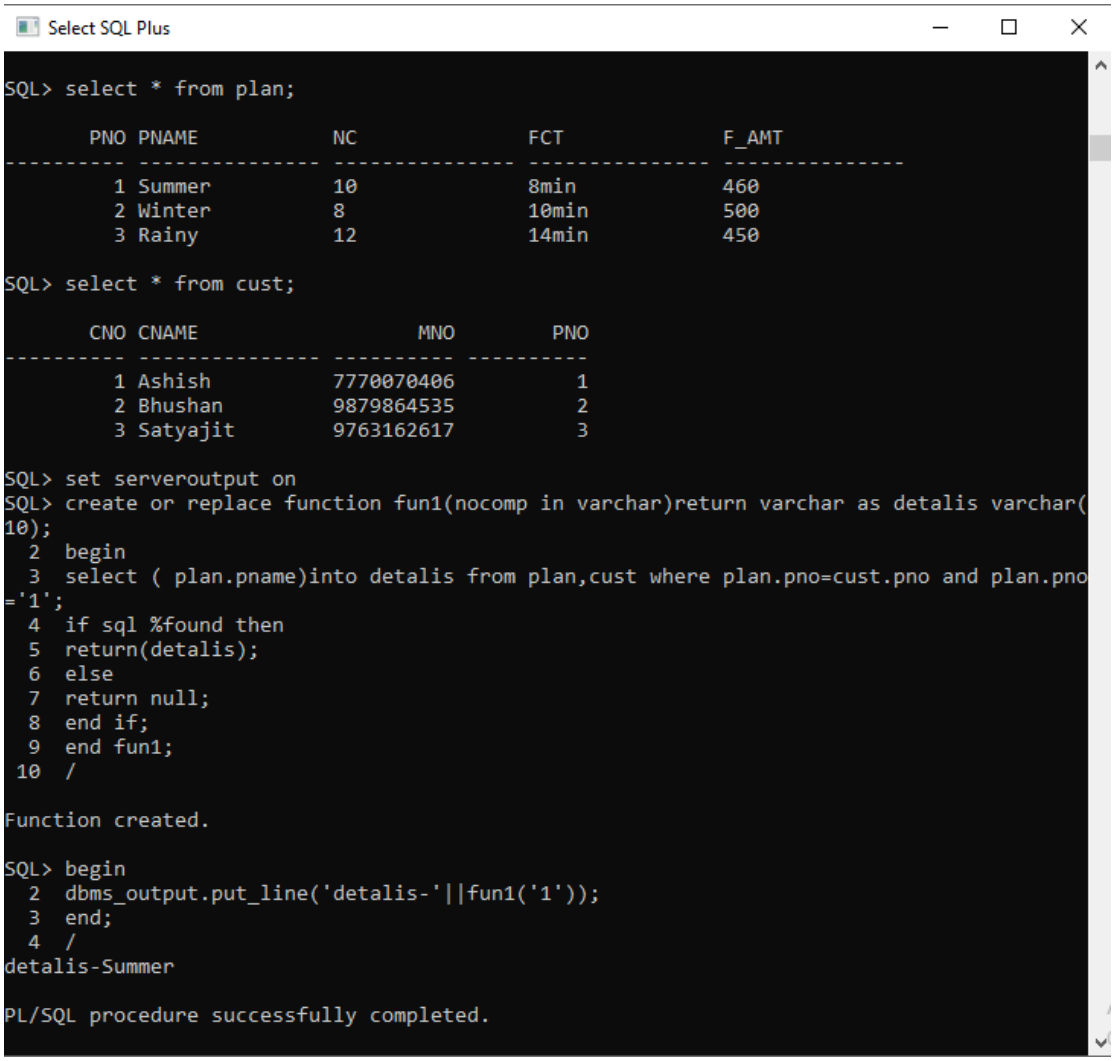


SLIP-8

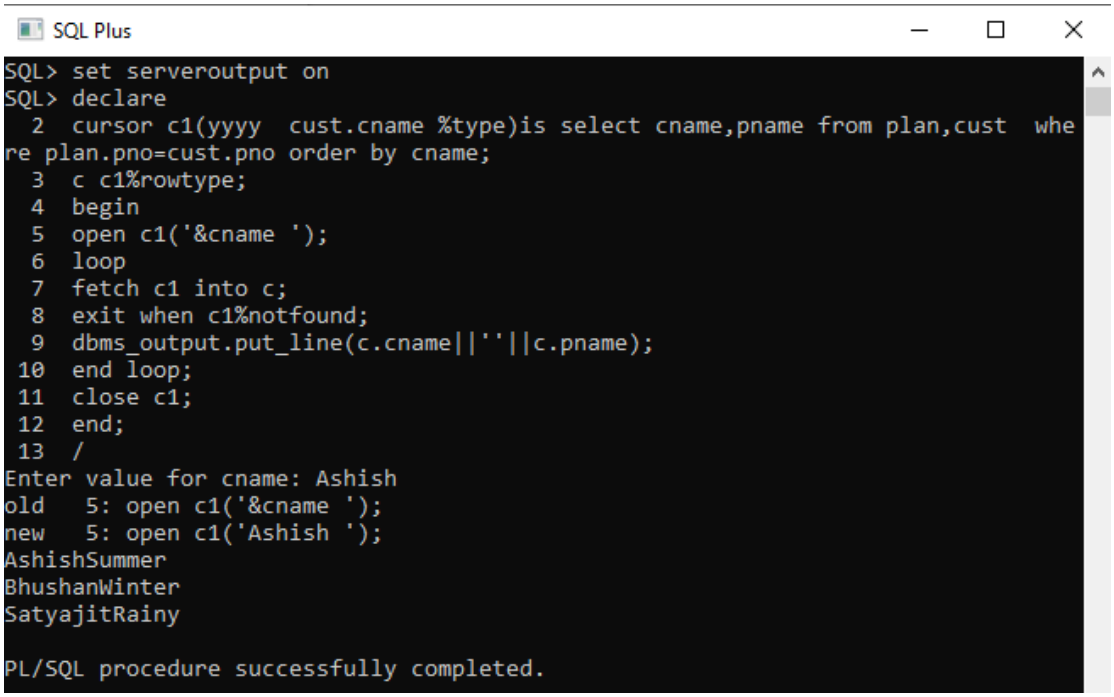
Q3 Consider the following entities and their relationships. **[40]**
Plan (plan_no, plan_name, nooffreecalls, freecalltime, fix_amt)
Customer (cust_no, cust_name, mobile_no)
Relation between Plan and Customer is One to Many.
Constraint: Primary key, fix_amt should be greater than 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will accept plan number from user and display all the details of the selected plan



2) Write a cursor which will display customer wise plan details.(Use Parameterized Cursor)



SLIP-9

Q3 Consider the following entities and their relationships. **[40]**
Project (pno, pname, start_date, budget, status)
Department (dno, dname, HOD, loc)
The relationship between Project and Department is Many to One.
Constraint: Primary key.
Project Status Constraints: C – Completed,
P - Progressive,
I – Incomplete

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which accept department name and display total number of projects
whose status is “p”(progressive).

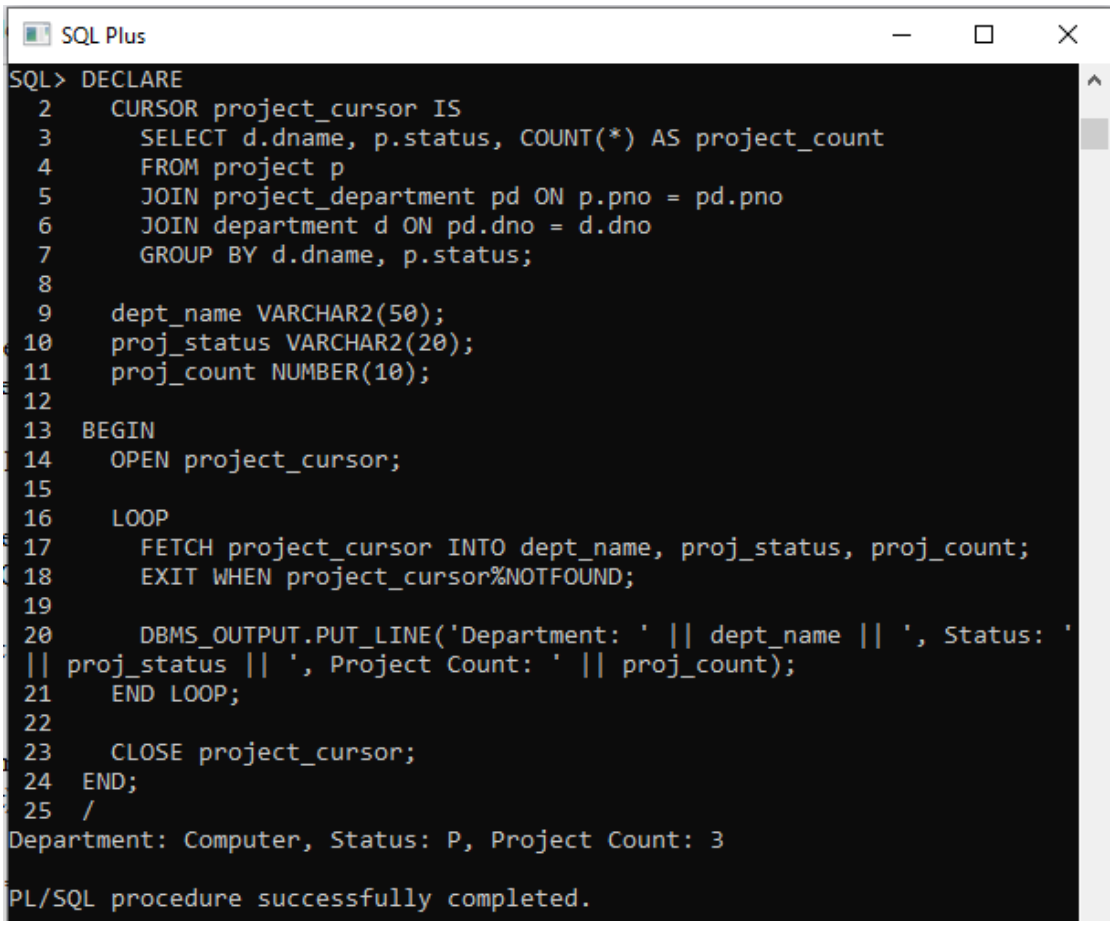
SQL Plus

```
SQL> select * from project;

      PNO PNAME                S_DATE                   BUDGET
--------- -------------------- ------------------------ ---------------
STATUS           DNO
--------- ----------
      101 RDBMS                10-2-2015                9,000
P                 1

      102 Java                 23-6-2015                10,000
P                 2

      103 Python               02-5-2015                11,500
P                 3


SQL> select * from department;

      DNO DNAME                HOD                  LOC
--------- -------------------- -------------------- --------------------
        1 Computer             Ashish               Pune
        2 Computer             Bhushan              Pune
        3 Computer             Satyajit             Pune

SQL> set serveroutput on
SQL> create or replace function f1(xyz in varchar)return number as abc number;
  2  begin
  3  select count(project.pno)into abc from department,project where department.dno=project.dno and department.dname='computer' and project.status='P';
  4  if sql %found then
  5  return(abc);
  6  else
  7  return null;
  8  end if;
  9  end f1;
 10  /

Function created.
```

SQL Plus

```
SQL> begin
  2  dbms_output.put_line('project-'||f1('computer'));
  3  end;
  4  /
project-3

PL/SQL procedure successfully completed.
```

2) Write a cursor which will display status wise project details of each department.



SLIP-10

Q3 Consider the following entities and their relationships. **[40]**
Gym (Name, city, charges, scheme)
Member (ID, Name, phoneNo, address)
Relation between Gym and member is one to many.
Constraint: Primary Key, charges must be greater than 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will accept member id and scheme from user and display charges paid
by that member.

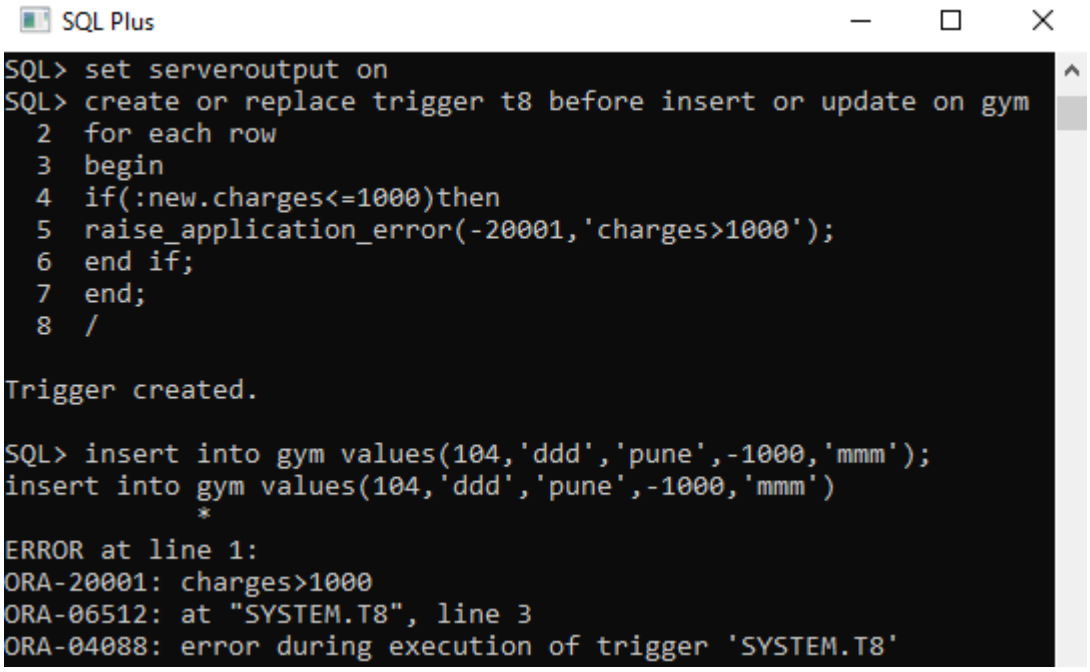
SQL Plus

```
SQL> select * from gym;

       GNO GNAME                CITY                    CHARGES
---------- -------------------- -------------------- ----------
SCHEME
--------------------
       101 FIT_7                Pune                        1000
xyz

       102 Grome                Pune                        1200
abc

       103 Body_spa             Pune                         800
qwr


SQL> select * from member;

       MID MNAME                     PHONE ADDR                          GNO
---------- -------------------- ---------- -------------------- ----------
         1 Ashish               7770070406 Vishrantwadi                101
         2 Bhushan               986543213 Koregoan                    102
         3 Stayajit             7867843254 Karve_nagar                 103

SQL> set serveroutput on
SQL> create or replace function f3(abc in varchar) return number as xyz number;
  2  begin
  3  select gym.charges into xyz from gym,member where gym.gno=member.gno and mid='2';
  4  if sql %found then
  5  return(xyz);
  6  else
  7  return null;
  8  end if;
  9  end f3;
 10  /

Function created.

SQL> begin
  2  dbms_output.put_line('gym-'||f3 ('2'));
  3  end;
  4  /
```

SQL Plus

```
  4  /
gym-1200

PL/SQL procedure successfully completed.
```

2) Write a trigger which will fire before insert or update on Gym having charges less than 1000. (Raise user defined exception and give appropriate message)

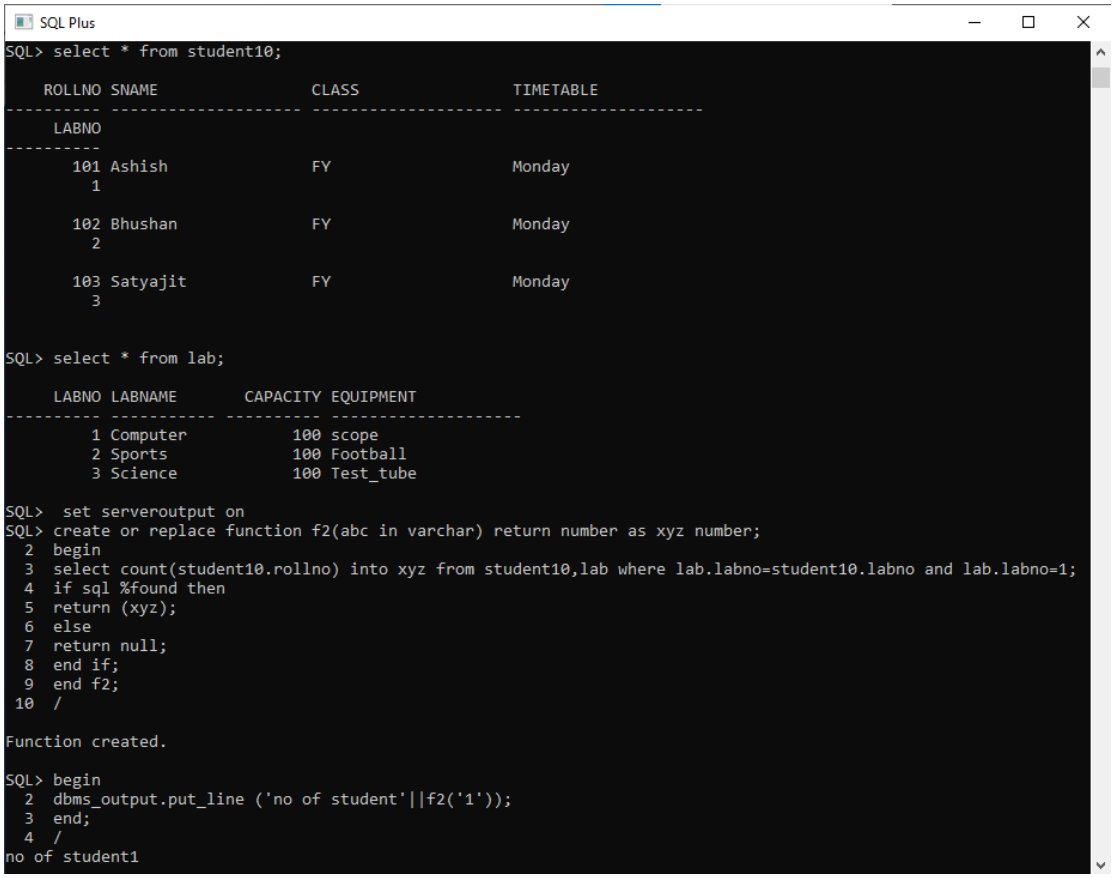


SLIP-11

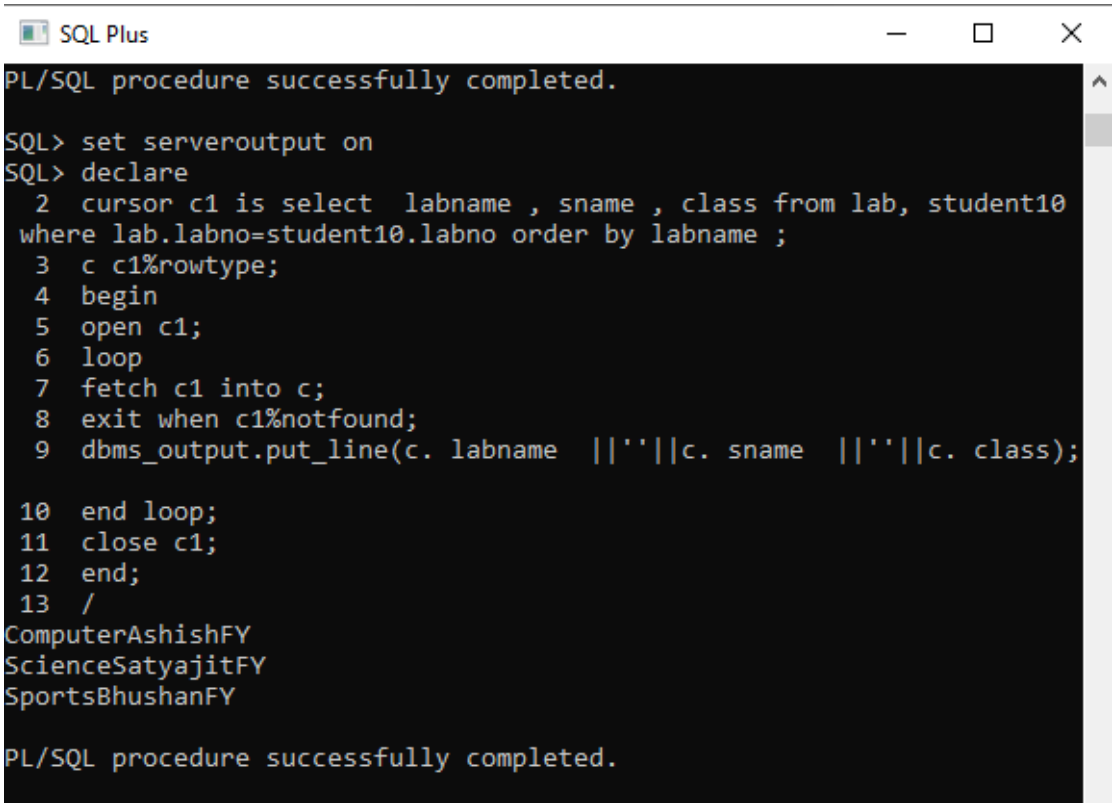
Q3 Consider the following entities and their relationships. **[40]**
Student (rollno, sname, class, timetable)
Lab (LabNo, LabName, capacity, equipment)
Relation between Student and Lab is Many to One.
Constraint: Primary Key, capacity should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will accept Lab number from user and display total number of student allocated in that lab.



2) Write a cursor which will display lab wise student details.

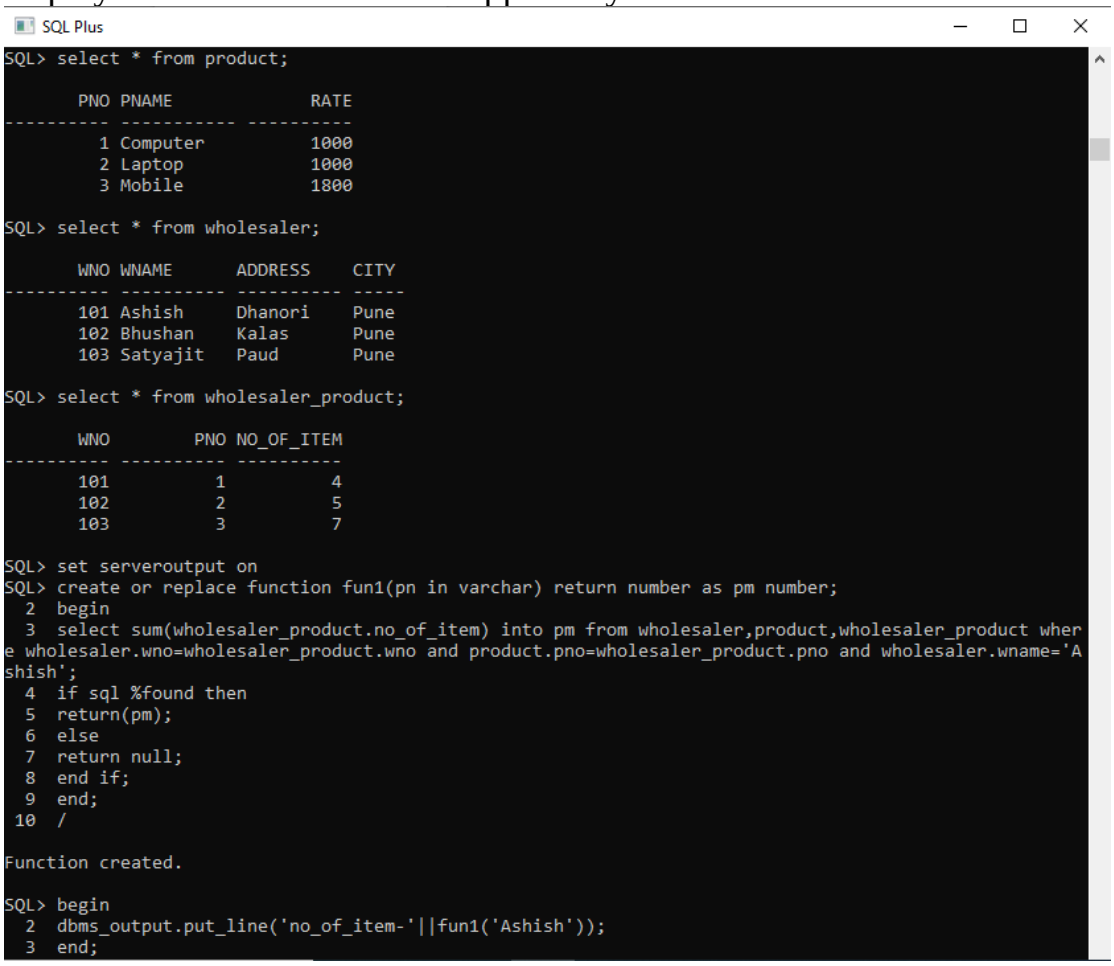


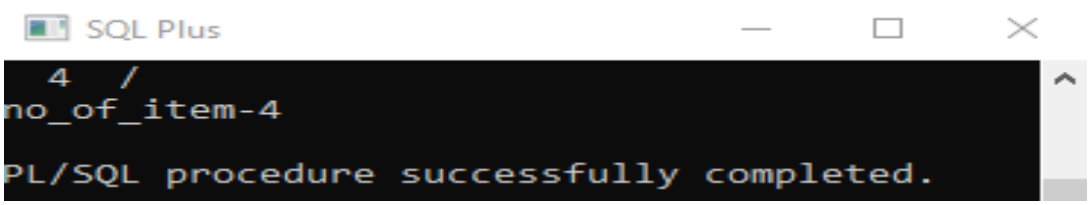
SLIP-12

Q3 Consider the following entities and their relationships. **[40]**
Wholesaler (w_no, w_name, address, city)
Product (product_no, product_name, rate)
Relation between Wholesaler and Product is Many to Many with quantity as descriptive attribute.
Constraint: Primary key, rate should be > 0.

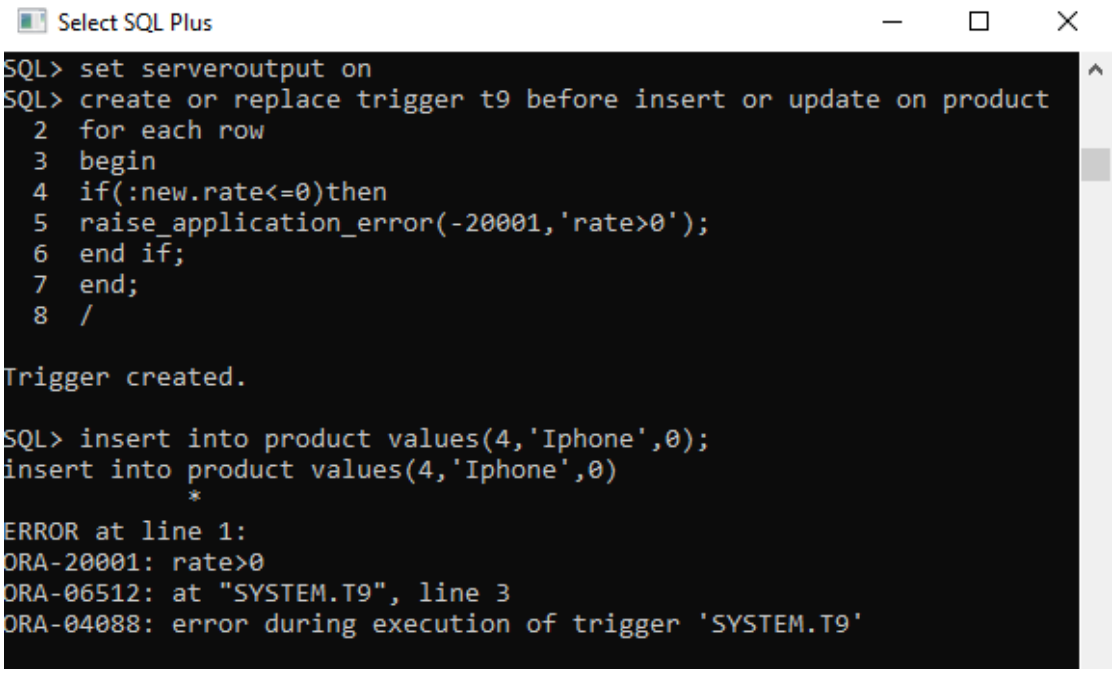
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will accept wholesaler name from user and will display total number of items supplied by him.





2) Write a trigger which will fire before insert or update on product having rate less than or equal to zero (Raise user defined exception and give appropriate message).

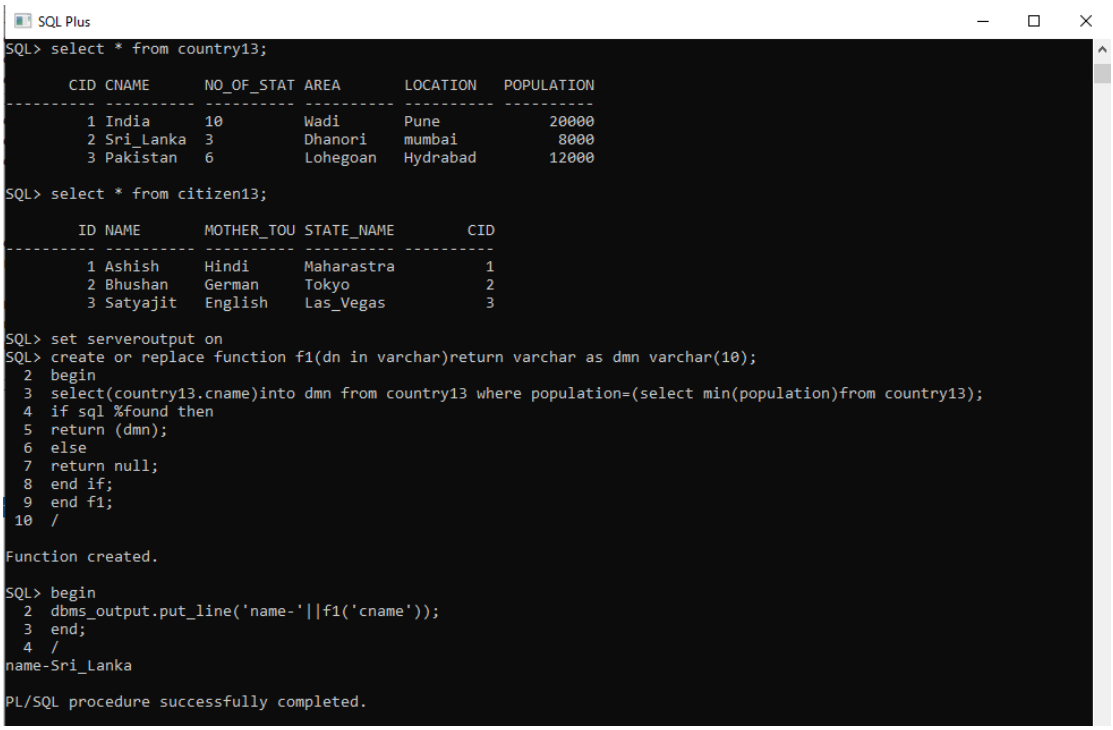


SLIP-13

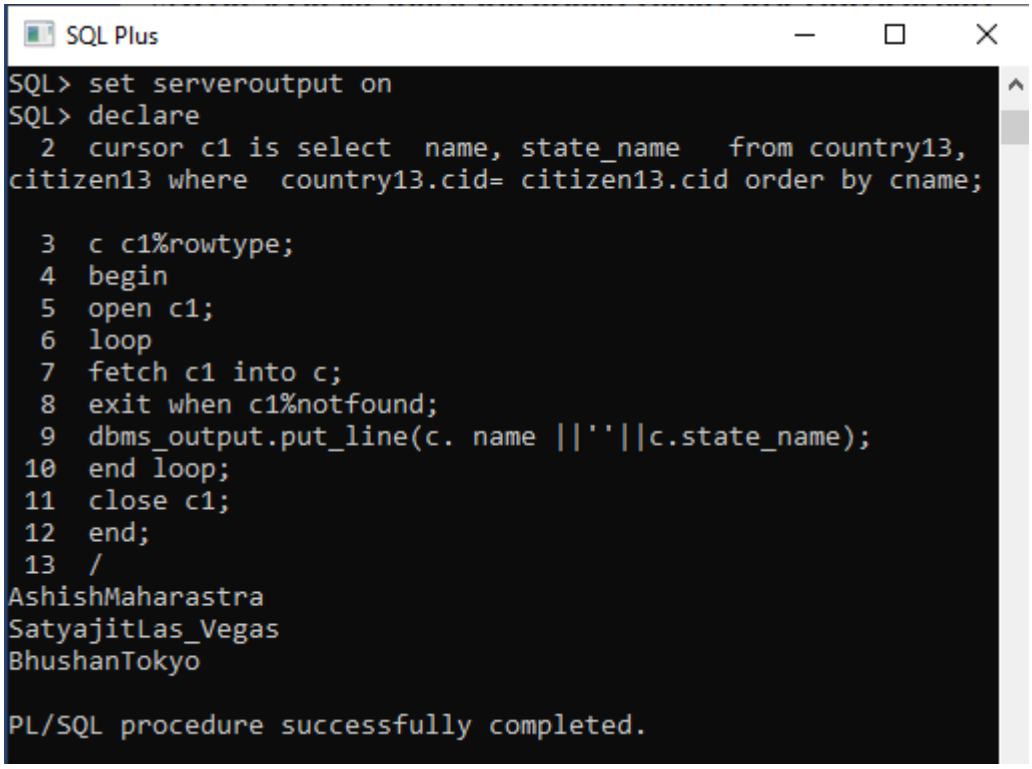
Q3 Consider the following entities and their relationships. **[40]**
Country (CId, CName , no_of_states, area, location, population)
Citizen(Id, Name, mother_toung, state_name)
Relation between Country and Citizen is one to many.
Constraint: Primary key, area should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will display name of the country having minimum population.



2) Write a cursor which will display county wise citizen details.



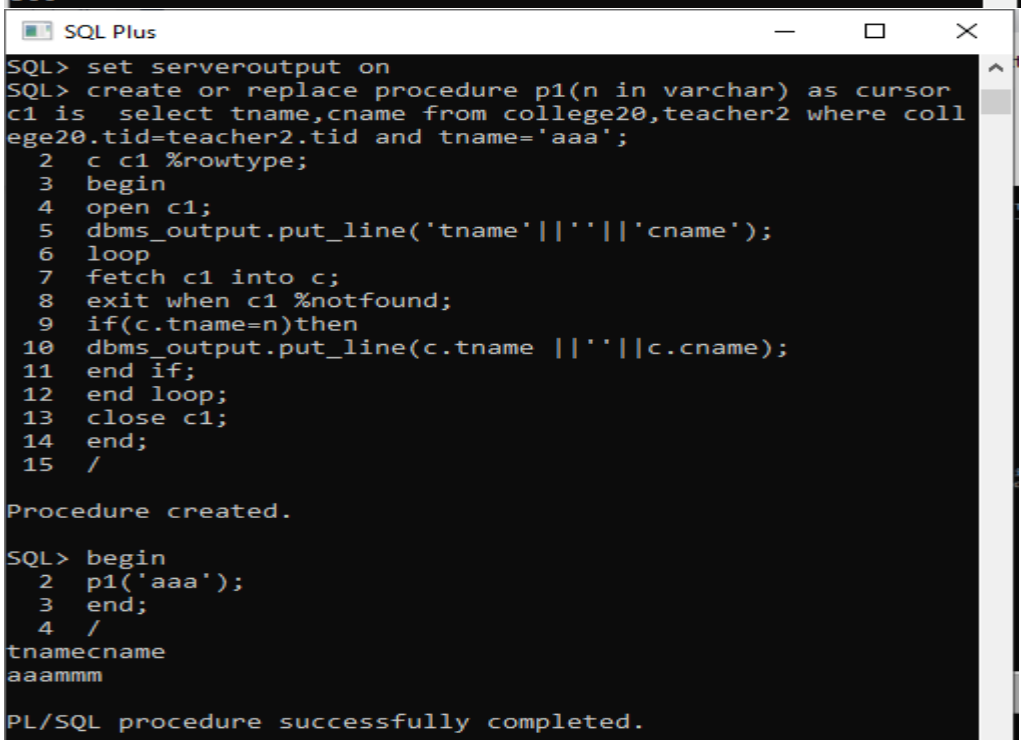
SLIP-14

Q3 Consider the following entities and their relationships. **[40]**
College (code, college_name, address)
Teacher (teacher_id, teacher_name, Qualification, specialization, salary,Desg)
Relation between Teacher and College is Many to One.
Constraint: Primary Key, qualification should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

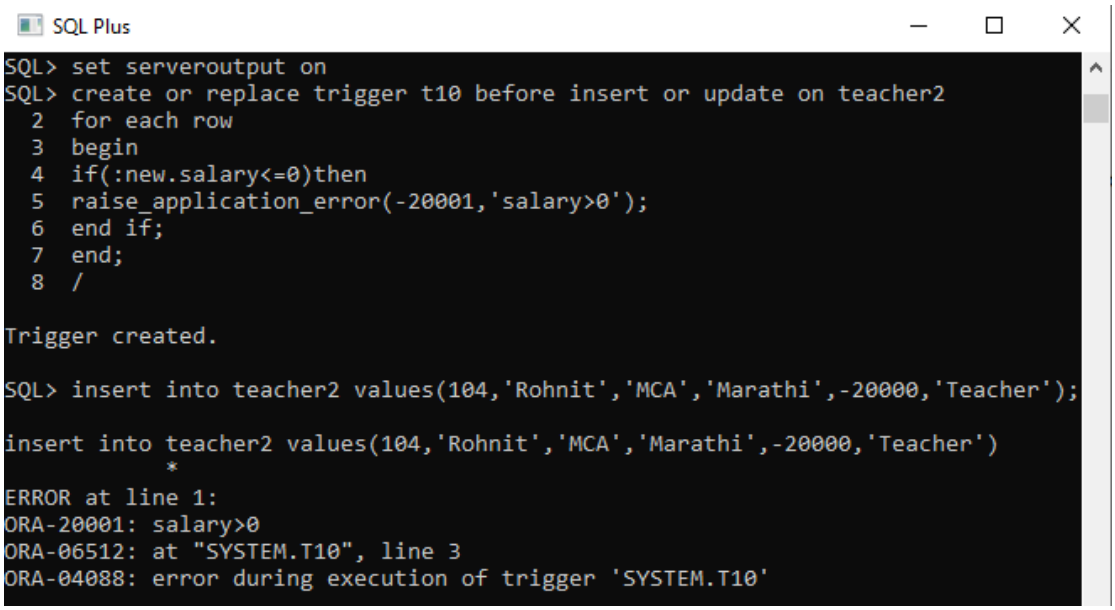
1) Write a procedure which will accept teacher name from user and display his/her college details.

```
SQL Plus
SQL> select * from teacher2;

       TID TNAME                QUALIFICATION         SPECIAL
IZATION
---------- -------------------- -------------------- -------
-------------
    SALARY DESG
---------- --------------------
       100 aaa                  m.bba                 english
     15000 head_of_department

       200 Ashish               bba                   english
     18000 Teacher

       300 Bhushan              b.com                 english
     25000 Principal


SQL> select * from college20;

       CID CNAME                ADDR
TID
---------- -------------------- -------------------- -------
---
         1 mmm                  pune
100
         2 xyz                  pune
200
         3 abc                  pune
300
```



```
SQL Plus
SQL> set serveroutput on
SQL> create or replace procedure p1(n in varchar) as cursor
c1 is  select tname,cname from college20,teacher2 where coll
ege20.tid=teacher2.tid and tname='aaa';
  2  c c1 %rowtype;
  3  begin
  4  open c1;
  5  dbms_output.put_line('tname'||''||'cname');
  6  loop
  7  fetch c1 into c;
  8  exit when c1 %notfound;
  9  if(c.tname=n)then
 10  dbms_output.put_line(c.tname ||''||c.cname);
 11  end if;
 12  end loop;
 13  close c1;
 14  end;
 15  /

Procedure created.

SQL> begin
  2  p1('aaa');
  3  end;
  4  /
tnamecname
aaammm

PL/SQL procedure successfully completed.
```

2) Write a trigger which will fire before insert or update on Teacher having salary less than or equal to zero (Raise user defined exception and give appropriate message)



SLIP-15

Q3 Consider the following entities and their relationships. **[40]**
Driver (driver_id, driver_name, address)
Car (license_no, model, year)
Relation between Driver and Car is Many to Many with date and time as descriptive attribute.
Constraint: Primary key, driver_name should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will display the total number of person who are using “Swift” car.

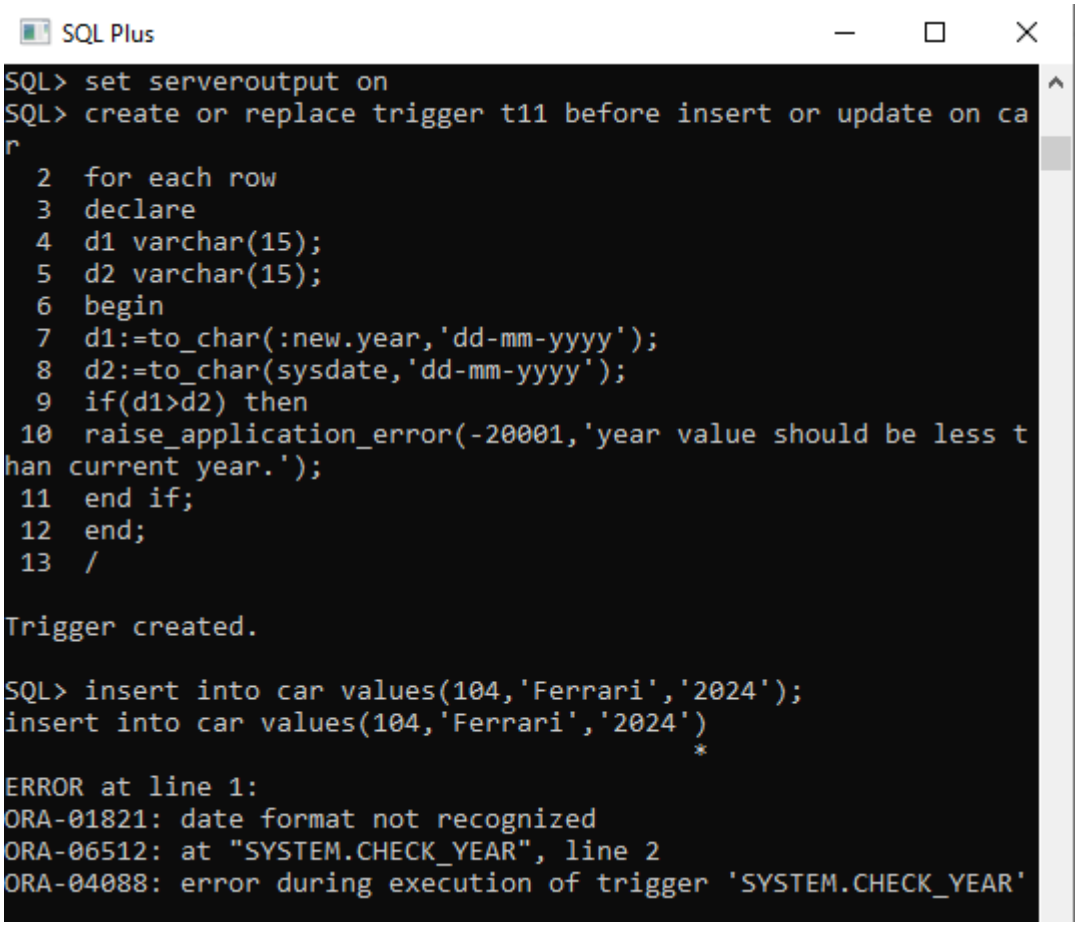
SQL Plus

```
SQL> select * from driver;

       DID DNAME           ADDRESS
---------- --------------- --------------------
         1 Ashish          Pune
         2 Bhushan         Pune
         3 Satyajit        Pune

SQL> select * from car;

       LNO MODEL            YEAR
---------- ---------- ----------
       101 Swift            2000
       102 Roll_Royce       2008
       103 Benz             2003

SQL> select * from dc;

       DID        LNO T_DATE     TIME
---------- ---------- ---------- -----
         1        101 15-2-2000  10aAM
         2        102 12-3-2007  4PM
         3        103 27-12-2003 3AM

SQL> set serveroutput on
SQL> create or replace function fun2(bcd in varchar)return nu
mber as efg number;
  2  begin
  3  select sum(driver.did)into efg from driver,car,dc where
driver.did=dc.did and car.lno=dc.lno and car.model='swift';
  4  if sql %found then
  5  return (efg);
  6  else
  7  return null;
  8  end if;
  9  end fun2;
 10  /

Function created.

SQL> begin
  2  dbms_output.put_line('person-'||fun2('Swift'));
  3  end;
```

SQL Plus

```
  4  /
person-

PL/SQL procedure successfully completed.
```

2) Write a trigger which will fire before insert or update on year. If year value is more than current year. (Raise user defined exception and give appropriate message)



SLIP-16

Q3 Consider the following entities and their relationships. **[40]**

Game (game_name, no_of_players, coach_name)

Player (pid, pname, address, club_name)

Relation between Game and Player is Many to Many.

Constraint: Primary key, no_of_players should be > 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure which will display games details having number of players more than 5.

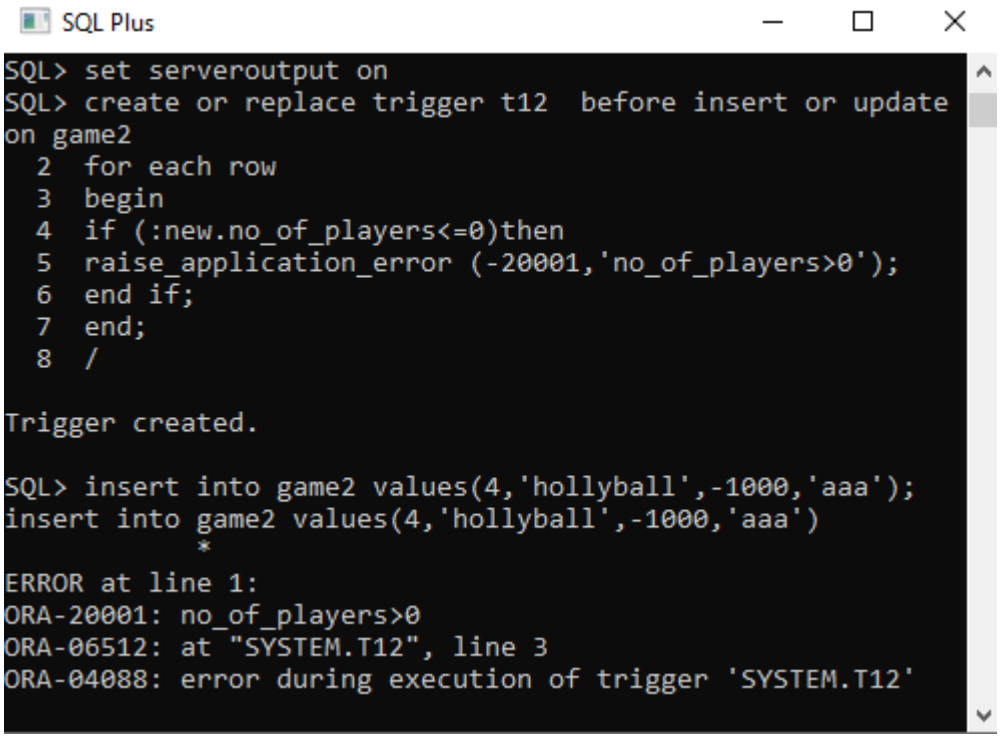
SQL Plus

```
SQL> select * from  game2;

       GID GNAME                NO_OF_PLAYERS        COACH_NAME
---------- -------------------- -------------------- --------------------
         1 football             11                   aaa
         2 cricket              12                   xyz
         3 hockey               6                    qwe

SQL> select * from  player;

       PID PNAME                ADDR                 CLUB_NAME
---------- -------------------- -------------------- --------------------
       100 mmm                  pune                 pfc
       101 ashish               pune                 cbi
       102 bhushan              pune                 cid
```

SQL Plus

```
SQL> set serveroutput on
SQL> create or replace procedure p3(n in varchar)as cursor c
3 is select gname,coach_name from game2,player,gp where game
2.gid=gp.gid and player.pid=gp.pid and no_of_players > 5;
  2  c c3 %rowtype;
  3  begin
  4  open c3;
  5  dbms_output.put_line('gname'||''||'coach_name');
  6  Loop
  7  Fetch c3 into c;
  8  exit when c3 %notfound;
  9  if(c.gname=n)then
 10  dbms_output.put_line(c.gname||''||c.coach_name);
 11  end if;
 12  end loop;
 13  close c3;
 14  end;
 15  /

Procedure created.

SQL> begin
  2  p3('football');
  3  end;
  4  /
gnamecoach_name
footballaaa

PL/SQL procedure successfully completed.

SQL>
```

2) Write a trigger which will fire before insert or update on Game having no_of_players less than or equal to zero. (Raise user defined exception and give appropriate message)



SLIP-17

Q3. Consider the following Item_Supplier database **[40]**
Company (name , address , city , phone , share_value)
Person (pname ,pcity)
Relationship between Company and Person is M to M relationship with descriptive
attribute No_of_shares i
Constraints: name,pname primary key
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:
1) Write a trigger before insert or update on No_of_shares field should not be zero.(Raise user defined exception and give appropriate message)

SQL Plus

```
SQL> select * from company0;

       CID CNAME                ADDR                 CITY
---------- -------------------- -------------------- --------------------
     PHONE SHARE_VALUE
---------- -----------
         1 Solanki_Ltd          Wadi                 Pune
7770070406          280

         2 Gaikwad_Ltd          Bhiwabdi             Mumbai
9876567897          200

         3 Patale_Ltd           Koregaon             Pune
8976523432          320


SQL> select * from person3;

       PNO PNAME                PCITY
---------- -------------------- --------------------
        11 Ashish               Pimpari
        12 Bhushan              Pune
        13 Satyajit             Chincwad

SQL> select * from com_per;

       CID        PNO NO_OF_SHARES
---------- ---------- ------------
         1         11           50
         2         12           30
         3         13           20

SQL> set serveroutput on
SQL> create or replace trigger t13 before insert or update on com_per
  2  for each row
  3  begin
  4  if(:new.no_of_shares<=0)then
  5  raise_application_error(-20001,'no_of_shares>0');
  6  end if;
  7  end;
  8  /

Trigger created.
```

SQL Plus

```
SQL> insert into com_per values(6,16,-1000);
insert into com_per values(6,16,-1000)
            *
ERROR at line 1:
ORA-20001: no_of_shares>0
ORA-06512: at "SYSTEM.T13", line 3
ORA-04088: error during execution of trigger 'SYSTEM.T13'
```

2) Write a function to display total no_of_shares of a specific person.

SQL Plus

```
SQL> select * from company0;

       CID CNAME                ADDR                 CITY
---------- -------------------- -------------------- --------------------
     PHONE SHARE_VALUE
---------- -----------
         1 ashish               koregaon             pune
1122334455         200

         2 bhushi               khese                pune
1234567890         300

         3 satya                pimpri               pune
9876543210         100


SQL> select * from person3;

       PNO PNAME                PCITY
---------- -------------------- --------------------
        11 solanki              pimpari
        12 gaikwad              pimpari
        13 pathale              pimpari

SQL> select * from com_per;

       CID        PNO NO_OF_SHARES
---------- ---------- ------------
         1         11           20
         2         12           30
         3         13           10
```

SQL Plus

```
SQL> set serveroutput on
SQL> create or replace function f2(xyz in varchar) return number as abc nu
mber;
  2  begin
  3  select sum(person3.pno) into abc from company0,person3,com_per where
company0.cid=com_per.cid  and person3.pno=com_per.pno and pname='ashish';
  4  if sql %found then
  5  return(abc);
  6  else
  7  return null;
  8  end if;
  9  end f2;
 10  /

Function created.

SQL>
SQL> begin
  2  dbms_output.put_line('company- 20'||f2('ashish'));
  3  end;
  4  /
company- 20

PL/SQL procedure successfully completed.
```

SLIP-18

Q3. Consider the following entities and their relationship. [40]

Student (s_reg_no, s_name, s_class)

Competition (comp_no, comp_name, comp_type)

Relationship between Student and Competition is many-to-many with descriptive attribute rank and year.

Constraints: primary key, foreign key, primary key for third table(s_reg_no, comp_no, year),s_name and comp_name should not be null,comp_type can be sports or academic.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will accept s_reg_no of student and returns total number of competition in which student has participated in a given year.

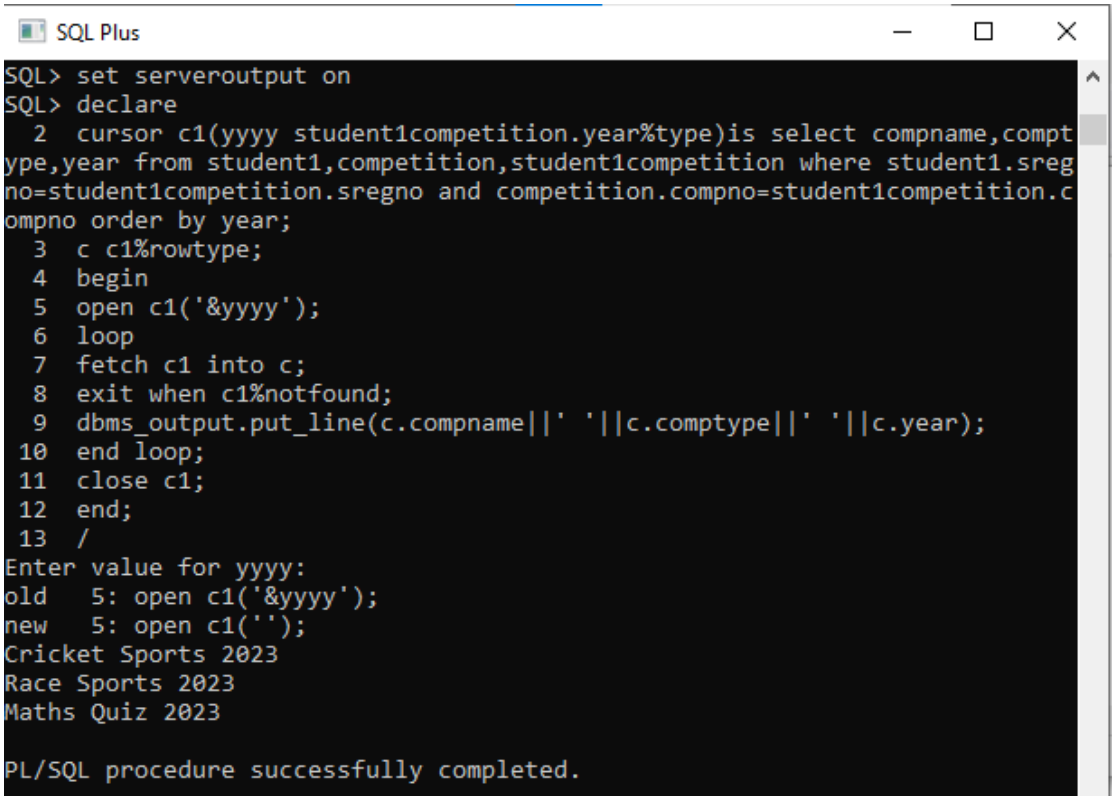
SQL Plus

```
SQL> select * from competition;

    COMPNO COMPNAME   COMPTYPE
---------- ---------- ----------
       101 Cricket    Sports
       102 Maths      Quiz
       103 Race       Sports

SQL> select * from student1competition;

    SREGNO     COMPNO       YEAR
---------- ---------- ----------
         1        101       2021
         2        102       2022
         3        103       2023

SQL> set serveroutput on
SQL> create or replace function fun1(nocomp in varchar) return n
umber as nofcomp number;
  2  begin
  3  select count(competition.compno) into nofcomp from student1
, competition, student1competition where student1.sregno=student
1competition.sregno and competition.compno=student1competition.c
ompno and student1.sregno=1;
  4  if sql %found then
  5  return(nofcomp);
  6  else
  7  return null;
  8  end if;
  9  end fun1;
 10  /

Function created.
```

SQL Plus

```
SQL> begin
  2  dbms_output.put_line('no of competition-'||fun1(2021));
  3  end;
  4  /
no of competition-1

PL/SQL procedure successfully completed.
```

2) Write a cursor which will display year wise details of competitions. (Use parameterized cursor)



SLIP-19

Q3 Consider the following entities and their relationships. **[40]**

Game (game_name, no_of_players, coach_name)

Player (pid, pname, address, club_name)

Relation between Game and Player is Many to Many.

Constraint: Primary key, no_of_players should be > 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will return total number of football players of "Sports Club".

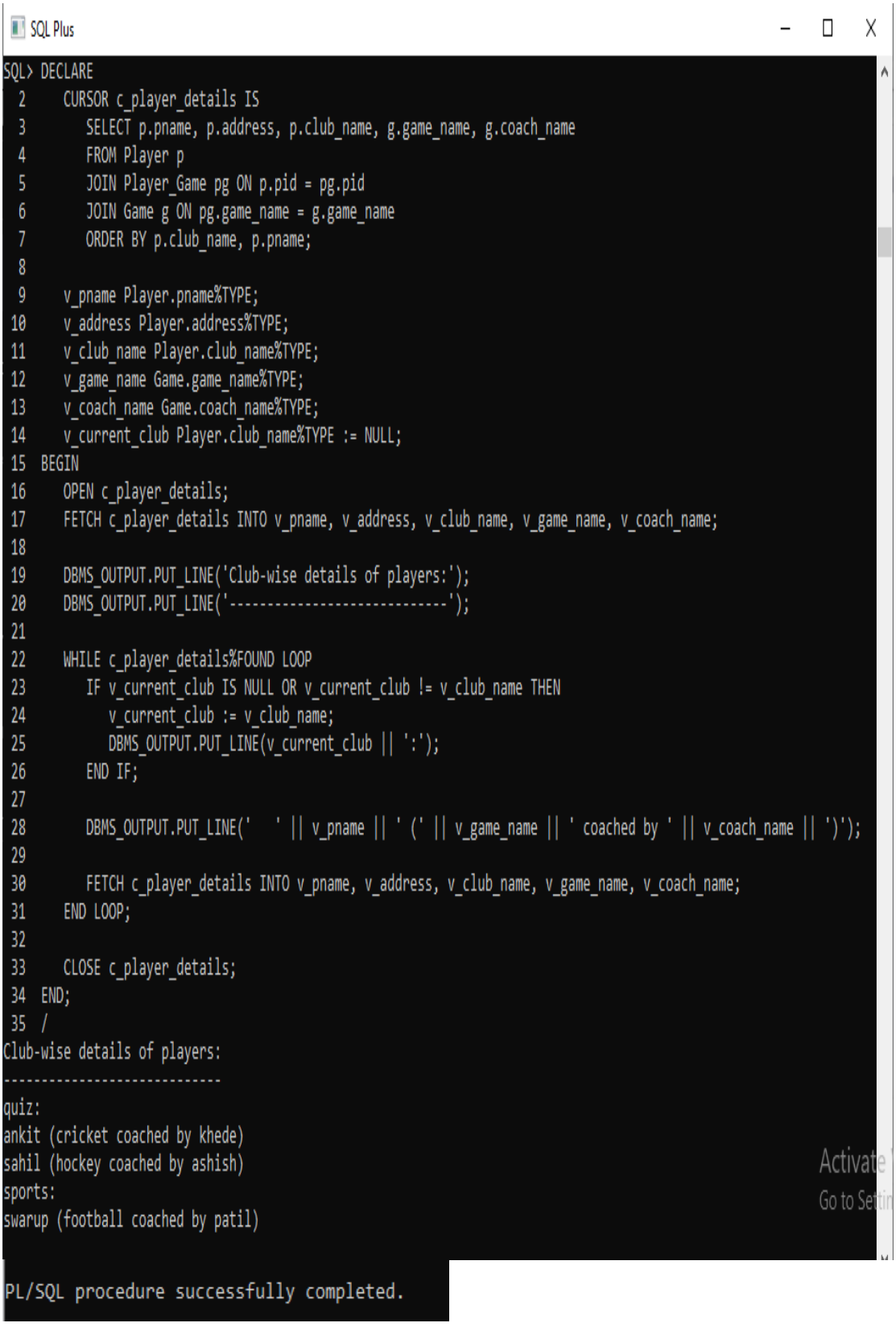
SQL Plus

```
SQL> select * from game;

GAME_NAM NO_OF_PLAYER COACH_
-------- ------------ ------
football           10 patil
cricket            12 khede
hockey              6 ashish

SQL> select * from player;

       PID PNAME  ADDRE CLUB_N
---------- ------ ----- ------
       101 swarup pune  sports
       102 ankit  pune  quiz
       103 sahil  pune  quiz

SQL> select * from player_game;

       PID GAME_NAM
---------- --------
       101 football
       102 cricket
       103 hockey
```

SQL Plus

```
SQL> CREATE OR REPLACE FUNCTION get_football_player_count
  2  RETURN NUMBER
  3  IS
  4       v_count NUMBER := 0;
  5  BEGIN
  6       SELECT COUNT(DISTINCT p.pid) INTO v_count
  7       FROM Player p
  8       JOIN Player_Game pg ON p.pid = pg.pid
  9       JOIN Game g ON pg.game_name = g.game_name
 10       WHERE g.game_name = 'Football' AND p.club_name = 'Sport
s Club';
 11
 12       RETURN v_count;
 13  END;
 14  /

Function created.

SQL>
SQL> DECLARE
  2       v_player_count NUMBER;
  3  BEGIN
  4       v_player_count := get_football_player_count();
  5       DBMS_OUTPUT.PUT_LINE('Total number of football players
in Sports Club: 1' || v_player_count);
  6  END;
  7  /
Total number of football players in Sports Club: 10

PL/SQL procedure successfully completed.
```

2) Write a cursor which will display club wise details of players.



SLIP-20

Q3 Consider the following entities and their relationships. **[40]**
Driver (driver_id, driver_name, address)
Car (license_no, model, year)
Relation between Driver and Car is Many to Many with date and time as descriptive attribute.
Constraint: Primary key, driver_name should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure to display car details used on specific day.

SQL Plus

```
SQL> select * from driver9;

      D_ID DNAME      ADDR
---------- ---------- ------
         1 Ashish     Pune
         2 Bhushan    Pimpri
         3 Satyajit   Daund

SQL> select * from car9;

       LNO MODEL           YEAR
---------- ---------- ----------
         1 Benz             2004
         2 Ferrari          2002
         3 Roll_Royce       1999

SQL> select * from dc9;

      D_ID        LNO DAY
---------- ---------- ----------
         1          1 Monday
         2          2 Wednesday
         3          3 Friday

SQL> set serveroutput on
SQL> create or replace procedure p10(n in varchar)as cursor c1 is select Dn
ame,day,model,year from Driver9,car9,dc9 where Driver9.D_id=dc9.D_id and ca
r9.Lno=dc9.Lno;
  2  c c1%rowtype;
  3  begin
  4  open c1;
  5  dbms_output.put_line('Dname'||''||'day'||''||'model'||''||'year');
  6  loop
  7  fetch c1 into c;
  8  exit when c1%notfound;
  9  if (c.day = n) then
 10  dbms_output.put_line(c.Dname||''||c.day||''||c.model||''||c.year);
 11  end if;
 12  end loop;
 13  close c1;
 14  end;
 15  /
```

SQL Plus

```
Procedure created.

SQL>
SQL> begin
  2  p10('Monday');
  3  end;
  4  /
Dnamedaymodelyear
AshishMondayBenz2004

PL/SQL procedure successfully completed.
```

2) Write a cursor which will display driver wise car details in the year 2004.