```
SQL> ------------------------------------1906055 : Lakhan Kumawat -----------------------------------

SQL> conn

Enter user-name: system

Enter password:

Connected.

SQL> desc stdmain;
 Name                              Null?    Type
 ---------------------------------------- -------- ---------------------------
 ROLLNO                            NOT NULL NUMBER(4)
 NAME                                       VARCHAR2(10)
 STATE                                      VARCHAR2(10)
 DOB                                        DATE
 BRANCH                                     VARCHAR2(5)
 CITY                                       VARCHAR2(10)


SQL> select * from stdmain;


    ROLLNO NAME      STATE     DOB       BRANC CITY
---------- ---------- ---------- --------- ----- ----------
      1701 Arvind    WB        15-JAN-99 CSE   Kolkata
      1702 Jhon      MH        02-MAR-99 EEE   Mumbai
      1703 Mohan     UP        15-JUL-91 ECE   Delhi
      1704 Ravi      MP        12-MAY-94 CSE   Bhopal
      1705 Karim     BR        10-MAR-91 ECE   Patna
      1706 Sita      UP        08-DEC-90 EEE   Kanpur
      1707 Pintu     BR        17-OCT-92 CSE   Chennai


7 rows selected.
```

```
SQL> desc smarks;

 Name                              Null?   Type
 ---------------------------------------- -------- ---------------------------
 ROLLNO                                    NUMBER
 SUBJECTNAME                               VARCHAR2(20)
 MARKS                                     NUMBER


SQL> select * from smarks;


    ROLLNO SUBJECTNAME          MARKS
---------- -------------------- ----------
      1701 C++                    75
      1701 Oracle                 84
      1701 Java                   95
      1701 OS                     62
      1702 C++                    46
      1702 Oracle                 70
      1702 Java                   55
      1702 OS                     56
      1703 C++                    82
      1703 Oracle                 84
      1703 Java                   74


    ROLLNO SUBJECTNAME          MARKS
---------- -------------------- ----------
      1703 OS                     92
      1704 C++                    43
      1704 Oracle                 49
```

1704 Java   68

1704 OS   35

16 rows selected.

SQL>

SQL> select stdmain.rollno, name, sum(marks) from stdmain,smarks where
smarks.rollno=stdmain.rollno group by stdmain.rollno,name order by sum(marks) desc;

   ROLLNO NAME   SUM(MARKS)

---------- ---------- ----------

    1703 Mohan   332

    1701 Arvind   316

    1702 Jhon   227

    1704 Ravi   195

SQL> edit ques1

Program

set serveroutput on

declare

ctr number(2):=0;

cursor my_cur is select stdmain.rollno, name, sum(marks) as total from stdmain , smarks where
stdmain.rollno=smarks.rollno group by stdmain.rollno,name;

begin

DBMS_OUTPUT.PUT_LINE ('--');

FOR i IN my_cur LOOP

DBMS_OUTPUT.PUT_LINE (i.rollno||'---'|| i.name||'---'||i.total);

ctr:= ctr+1;

exit when ctr=3;

END LOOP;

DBMS_OUTPUT.PUT_LINE ('--------------------------------------');

end;

/

SQL> @ques1

1701---Arvind---316

1702---Jhon---227

1703---Mohan---332

PL/SQL procedure successfully completed.

SQL> start ques1

1701---Arvind---316

1702---Jhon---227

1703---Mohan---332

PL/SQL procedure successfully completed.

SQL> edit ques2

Program

set serveroutput on

prompt enter rollno;

accept r;

prompt enter subject;

accept s;

declare

vroll smarks.rollno%type;

vsubject smarks.subjectname%type;

vmarks smarks.marks%type;

begin

select rollno,subjectname,marks into vroll,vsubject,vmarks from smarks where rollno=&r and subjectname='&s';

dbms_output.put_line(vroll||' '||vsubject||' '||vmarks);

if vmarks <45 then

  update smarks set marks = vmarks+5 where rollno=vroll and subjectname=vsubject;

elsif vmarks>=46 and vmarks<50 then

  update smarks set marks =50 where rollno=vroll and subjectname=vsubject;

end if;

end;

/

SQL> @ques2

enter rollno

1701

enter subject

C++

old 6: select rollno,subjectname,marks into vroll,vsubject,vmarks from smarks where rollno=&r and subjectname='&s';

new 6: select rollno,subjectname,marks into vroll,vsubject,vmarks from smarks where rollno=1701 and subjectname='C++';

1701 C++ 75

PL/SQL procedure successfully completed.

SQL> edit ondelete

Program

```
create or replace trigger checkroll

before delete

on smarks

begin

if(rollno = 1701 OR rollno = 1702 OR rollno = 1703) then

raise_application_error(-20101.'Records can not be deleted ');

end if;

end;

/

SQL> start ondelete


Trigger created.


SQL> delete from smarks where rollno=1701;

delete from smarks where rollno=1701

             *

ERROR at line 1:

ORA-20001: Records can not be deleted

ORA-06512: at "SYSTEM.RESTRICTROLL", line 2

ORA-04088: error during execution of trigger 'SYSTEM.RESTRICTROLL'


SQL> spool off
```