EXPERIMENT: 5

i. Create a simple PL/SQL program which includes declaration section, executable section and exception –Handling section (Ex. Student marks can be selected from the table and printed for those who secured first class and an exception can be raised if no records were found).

ii. Insert data into student table and use COMMIT, ROLLBACK and SAVEPOINT in PL/SQL block..

i). We have to create the student table and insert the records in to the table as follows:

SQL> create table student(sid number(10),sname varchar2(20),rank varchar(10));

Table created.

SQL> insert into student values(501,'Ravi','second');

1 row created.

SQL> insert into student values(502,'Raju','third');

1 row created.

SQL> insert into student values(503,'Ramu','');

1 row created.

SQL> select *from student;

SID	SNAME	RANK
501	Ravi	second
502	Raju	third
503	Ramu	

PL/SQL CODE:

SQL>ed 5a

Enter the following code into the text editor and save the file with .sql format

```
set serveroutput on;
declare
   temp1 number(10);
   temp2 varchar2(10);

begin
select sid,sname into temp1,temp2 from student where rank='first';
dbms_output.put_line('Student No:'|| temp1 ||'  Name:'||temp2||' got first
rank');
exception
when no_data_found then
dbms_output.put_line('*****************************************');
dbms_output.put_line('# Error: there is no student got first rank');
end;
/
```

SQL> @5a;
****
Error: there is no student got first rank

PL/SQL procedure successfully completed.

SQL> update student set rank='first' where sid=503;
1 row updated.

SQL> select *from student;

SID	SNAME	RANK
501	Ravi	second
502	Raju	third
503	Ramu	first

SQL> @5a
Student No:503 Name:Ramu got first rank

PL/SQL procedure successfully completed.

ii)**SQL> select *from student;**

SID	SNAME	RANK
501	Ravi	second
502	Raju	third
503	Ramu	first

PL/SQL CODE:

SQL>ed 5b

Enter the following code into the text editor and save the file with .sql format

```
set serveroutput on;

DECLARE
        sno student.sid%type;
        name student.sname%type;
        srank student.rank%type;

BEGIN
        sno := &sno;
        name := '&name';
        srank := '&srank';
        INSERT into student values(sno,name,srank);
        dbms_output.put_line('One record inserted');
        COMMIT;
        -- adding savepoint
        SAVEPOINT s1;
        -- second time asking user for input
        sno := &sno;
        name := '&name';
        srank := '&srank';
        INSERT into student values(sno,name,srank);
        dbms_output.put_line('One record inserted');
        ROLLBACK TO SAVEPOINT s1;
END;
/
```

SQL> @5b;

```
SQL> @5b
Enter value for sno: 504
old   7:        sno := &sno;
new   7:         sno := 504;
Enter value for name: ali
old   8:        name := '&name';
new   8:         name := 'ali';
Enter value for srank: first
old   9:        srank := '&srank';
new   9:         srank := 'first';

Enter value for sno: 505
old  16:        sno := &sno;
new  16:         sno := 505;
Enter value for name: haji
old  17:        name := '&name';
new  17:         name := 'haji';
Enter value for srank: third
old  18:        srank := '&srank';
new  18:         srank := 'third';
One record inserted
One record inserted

PL/SQL procedure successfully completed.

SQL> select *from student;

       SID SNAME        RANK
----------------------------------
       501 Ravi         second
       502 Raju         third
       503 Ramu         first
       504 ali          first
```