Exercise 5 PL/SQL

5. i) Creation of simple PL/SQL program which includes declaration section, executable section and exception handling section.

ii) Insert data into student table and use commit rollback and save point in PL/SQL block.

Objective: the procedure of this program is to declare, execute and exception handling sections, using these Insert data into student table and use commit rollback and save point in PL/SQL block.

Program:

```
declare
sno student.student_number%type=&n;
name student.student_name%type;
begin
savepoint dup_data
select student_name into name from student where student-number=sno;
exception when NO_DATA_FOUND then
dbms_output.put_line('no such student ,so insert that sno into table');
Insert into student values (&student number, &student_name);
dbms_output.put_line('student number'|student.|student-number);
dbms_output.put_line('student name'||student. student_name );

Rollback dup_data;
end;
```

OUTPUT:

```
enter value for n:768
no such student ,so insert that sno into table
student number 768
student name chandu
```

COMMIT:
commits the current transaction. All changes made by the transaction become visible to others and are guaranteed to be durable if a crash occurs.
COMMIT -- commit the current transaction

SQL→ COMMIT [TABLENAME | TRANSACTION]
Example: SQL→ commit [student | insert]

Outputs
COMMIT
Message returned if the transaction is successfully committed.

WARNING: COMMIT: no transaction in progress if there is no transaction in progress.

ROLLBACK:

The ROLLBACK statement in SQL cancels the proposed changes in a pending database transaction. The transaction can be rolled back completely by specifying the transaction name in the ROLLBACK statement. A partial rollback can also be accomplished by specifying a save point name in lieu of the transaction name. The alternative to rolling back a transaction is to utilize the COMMIT command to make the proposed changes part of the relational database.
Begin transaction
……
SQLStatement(s)
...
Begin transaction

SAVEPOINT:

The SAVEPOINT statement names and marks the current point in the processing of a transaction. With the ROLLBACK statement, save points help us to undo parts of a transaction instead of the whole transaction.