NAME: K.SHAILAJA

HT.NO: 2303A52155

BATCH-34

ASSIGNMENT-1

QUESTION-1

Q1. Create an employee table with fields Emp_ID, FirstName, LastName, Dept, Designation, Experience, Salary.

```
SQL> connect
Enter user-name: system
Enter password:
Connected.
SQL> create table employee_2155(empid number(3),firstname varchar(50),lastname varchar(50),dept varchar(50),designation varchar(50),experience number(10), s
alary number(10));

Table created.

SQL> insert into employee_2155 values (101,'Shailaja','Kanukuntla','CSE','pr
ofessor',10,50000);

1 row created.

SQL> insert into employee_2155 values(102,'Himaja','rama','ECE','lecturer',5,30000);

1 row created.

SQL> insert into employee_2155 values(103,'Mahender','Nagula','EEE','asst professor',11,100000);

1 row created.

SQL> insert into employee_2155 values(104,'Mamata','Pandey','MECH','Tutor',2,28000);

1 row created.

SQL> insert into employee_2155 values(105,'Shashikala','Martha','CSE','HOD',7,10000);

1 row created.
```

Queries:

1. Create the schema/structure for the above employee table.
2. Insert atleast 5 records.

```
SQL> select * from employee_2155;

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
       101 Shailaja
Kanukuntla
CSE
professor                                                  10      50000


     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
       102 Himaja
rama
ECE
lecturer                                                    5      30000


     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
       103 Mahender
Nagula
```

```
Nagula
EEE
asst professor                                          11     100000


     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
       104 Mamata
Pandey
MECH
Tutor                                                       2      28000


     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
       105 Shashikala
Martha
CSE
HOD                                                         7      10000
```

3. Retrieve the FirstName,LastName and salary of the employees.

```
SQL> select firstname,lastname,salary from employee_2155;

FIRSTNAME
--------------------------------------------------
LASTNAME                                                SALARY
-------------------------------------------------- ----------
Shailaja
Kanukuntla                                               50000

Himaja
rama                                                     30000

Mahender
Nagula                                                  100000


FIRSTNAME
--------------------------------------------------
LASTNAME                                                SALARY
-------------------------------------------------- ----------
Mamata
Pandey                                                   28000

Shashikala
Martha                                                   10000


SQL> commit;

Commit complete.

SQL> select * from employee_2155
  2  where dept='CSE';

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
```

```
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
       101 Shailaja
Kanukuntla
CSE
professor                                                  10      50000


     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
       105 Shashikala
Martha
CSE
HOD                                                         7      10000
```

4. Retrieve the employees who belong to CSE department.

```
SQL> select * from employee_2155
  2  where dept='CSE';

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
       101 Shailaja
Kanukuntla
CSE
professor                                                  10      50000


     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
       105 Shashikala
Martha
CSE
HOD                                                         7      10000
```

5. Retrieve the Emp_ID of the employees whose department is ECE and salary is above 50,000.

```
SQL> select empid from employee_2155
  2  where dept='ECE'AND salary>50000;

no rows selected
```

6. Update the salary of the employee to 60,000 whose Emp_ID is 101.

```
SQL> update employee_2155 set salary=60000 where empid=101;

1 row updated.

SQL> select * from employee_2155 where sno=1;
select * from employee_2155 where sno=1
                               *
ERROR at line 1:
ORA-00904: "SNO": invalid identifier


SQL> select * from employee_2155 where empid=101;

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
       101 Shailaja
Kanukuntla
CSE
professor                                                  10      60000
```

7. Add a new column as Work_place and update the work_place of all the employees as SR University.

```
SQL> update employee_2155 set work_place='SR University';

5 rows updated.

SQL> select * from employee_2155;

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
       101 Shailaja
Kanukuntla
CSE

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
professor                                                  10      60000
SR University
```

```
     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
       102 Himaja
rama
ECE

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
lecturer                                                    5      30000
SR University
```

```
     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
       103 Mahender
Nagula
EEE

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
asst professor                                             11     100000
SR University
```

```
     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
       104 Mamata
Pandey
MECH

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
Tutor                                                       2      28000
SR University


     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
       105 Shashikala
Martha
```

```
       105 Shashikala
Martha
CSE

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
HOD                                                         7      10000
SR University
```

8. Delete the employee details whose experience is above 10 years.

```
SQL> delete from employee_2155
  2  where experience>10;

1 row deleted.
```

```
SQL> select * from employee_2155;

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
       101 Shailaja
Kanukuntla
CSE

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
professor                                                  10      60000
SR University
```

```
     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
       102 Himaja
rama
ECE

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
lecturer                                                    5      30000
SR University


     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
       104 Mamata
```

```
--------------------
       104 Mamata
Pandey
MECH

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
Tutor                                                       2      28000
SR University


     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
       105 Shashikala
Martha
CSE
```

```
Martha
CSE

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
HOD                                                         7      10000
SR University
```

9. Increment the salary of the employees by 5% whose experience is above 5 years.

```
SQL> update employee_2155 set salary=salary*1.05 where experience >5;

1 row updated.
```

```
SQL> select * from employee_2155;

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
       102 Himaja
rama
ECE

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
lecturer                                                    5      30000
SR University
```

```
     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                       EXPERIENCE     SALARY
------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
       104 Mamata
Pandey
MECH

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                       EXPERIENCE     SALARY
------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
Tutor                                                     2      28000
SR University
```

```
     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
       105 Shashikala
Martha
CSE

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
HOD                                                         7      10500
SR University
```

10. Delete the employees whose experience is above 2 years and salary below 40000.

```
SQL> delete from employee_2155 where experience>2 AND salary<40000;

2 rows deleted.
```

```
SQL> select * from employee_2155;

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
       104 Mamata
Pandey
MECH

     EMPID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT
--------------------------------------------------
DESIGNATION                                        EXPERIENCE     SALARY
-------------------------------------------------- ---------- ----------
WORK_PLACE
--------------------
Tutor                                                       2      28000
SR University


SQL> commit;

Commit complete.
```

QUESTION-2:

Create a Student table with the following fields: Student_ID, FirstName, LastName, Department, Year, CGPA, and Scholarship.

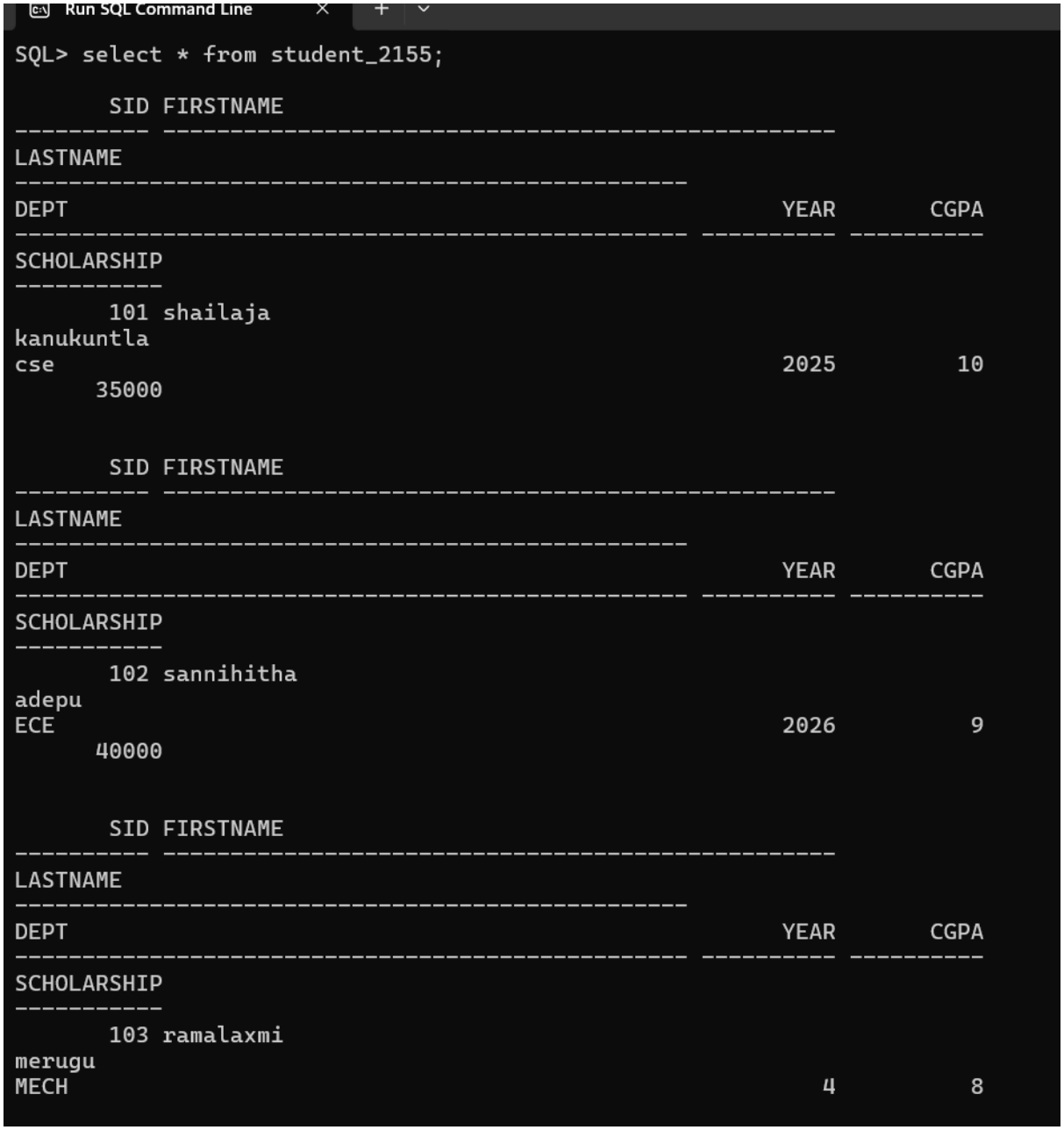
```
SQL>  create table employee_2155(empid number(3),firstname varchar(50),lastname varchar(50),dept varchar(50),designation varchar(50),experience number(10),
salary number(10));
 create table employee_2155(empid number(3),firstname varchar(50),lastname varchar(50),dept varchar(50),designation varchar(50),experience number(10), salar
y number(10))
             *
ERROR at line 1:
ORA-00955: name is already used by an existing object


SQL> create table student_2155(sid number(3),firstname varchar2(50),lastname
 varchar(50),dept varchar2(50),year number(5),cgpa number(5),scholarship num
ber(30))
  2  ;

Table created.
```

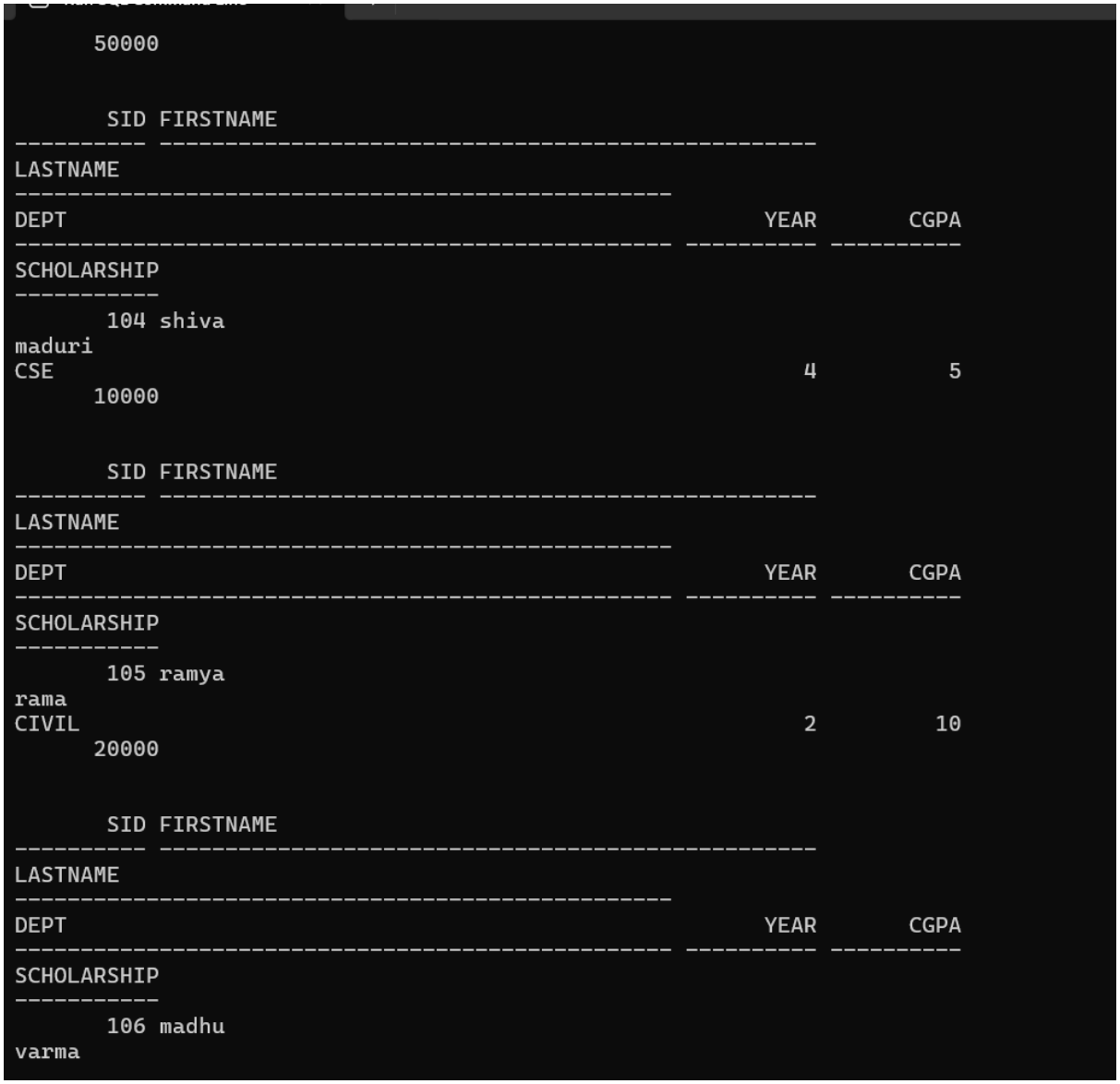
Queries:

1. Create the schema/structure for the student table.

2. Insert at least 5 records into the Student table.

```
SQL> insert into student_2155 values(101,'shailaja','kanukuntla','CSE',10.0,35000);
insert into student_2155 values(101,'shailaja','kanukuntla','CSE',10.0,35000)
            *
ERROR at line 1:
ORA-00947: not enough values


SQL> insert into student_2155 values(101,
  2  'shailaja','kanukuntla','cse',2025,10.0,35000);

1 row created.

SQL> insert into student_2155 values(102,'sannihitha','adepu','ECE',2026,9.2
,40000);

1 row created.

SQL> insert into student_2155 values(103,'ramalaxmi','merugu','MECH',4,8.0,5
0000);

1 row created.

SQL> insert into student_2155 values(104,'shiva','maduri','CSE',4,5.0,10000)
;

1 row created.

SQL> insert into student_2155 values(105,'ramya','rama','CIVIL',2,9.8,20000)
;

1 row created.

SQL> insert into student_2155 values(106,'madhu','varma','CSE',1,5.8,60000);


1 row created.
```


Run SQL Command Line
SQL> select * from student_2155;
SID FIRSTNAME
LASTNAME
DEPT YEAR CGPA
SCHOLARSHIP
101 shailaja
kanukuntla
cse 2025 10
35000
SID FIRSTNAME
LASTNAME
DEPT YEAR CGPA
SCHOLARSHIP
102 sannihitha
adepu
ECE 2026 9
40000
SID FIRSTNAME
LASTNAME
DEPT YEAR CGPA
SCHOLARSHIP
103 ramalaxmi
merugu
MECH 4 8



3. Retrieve the FirstName, LastName, and CGPA of all students.

```
SQL> select firstname,lastname,cgpa from student_2155;

FIRSTNAME
--------------------------------------------------
LASTNAME                                                CGPA
-------------------------------------------------- ----------
shailaja
kanukuntla                                              10

sannihitha
adepu                                                    9

ramalaxmi
merugu                                                   8


FIRSTNAME
--------------------------------------------------
LASTNAME                                                CGPA
-------------------------------------------------- ----------
shiva
maduri                                                   5

ramya
rama                                                    10

madhu
varma                                                    6


6 rows selected.

SQL> commit;

Commit complete.
```

4. Retrieve the students who are in the ECE department.

```
SQL> select * from student_2155
  2  where dept='ECE';

       SID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT                                                    YEAR       CGPA
-------------------------------------------------- ---------- ----------
SCHOLARSHIP
-----------
       102 sannihitha
adepu
ECE                                                     2026          9
      40000
```

5. Retrieve the Student_ID of students who are in their final year (Year = 4) and have a CGPA above 8.0.

```
SQL> select sid from student_2155 where year=4 AND cgpa=8.0;

       SID
----------
       103
```

6. Update the CGPA of the student whose Student_ID is 102 to 9.0.

```
SQL> update student_2155 set cgpa=9.0 where sid=102;

1 row updated.

SQL> select * from student_2155 where sid=102;

       SID FIRSTNAME
---------- --------------------------------------------------
LASTNAME
--------------------------------------------------
DEPT                                               YEAR       CGPA
-------------------------------------------------- ---------- ----------
SCHOLARSHIP
-----------
       102 sannihitha
adepu
ECE                                                2026          9
      40000
```

7. Add a new column called Email and update the Email field for all students using the format .@university.com.

```
SQL> Alter table student_2155 add email varchar2(100);

Table altered.
```

```
SQL> update student_2155 set email='shailu@university.com' where sid='101';

1 row updated.

SQL> update student_2155 set email='himaja@university.com' where sid='102';

1 row updated.

SQL> update student_2155 set email='ramalaxmi@university.com' where sid='103
';

1 row updated.

SQL> update student_2155 set email='shiva@university.com' where sid='104';

1 row updated.

SQL> update student_2155 set email='ramya@university.com' where sid='105';

1 row updated.

SQL> select * from student_2155;
```

```
SQL> select sid, firstname,email from student_2155;

       SID FIRSTNAME
---------- --------------------------------------------------
EMAIL
--------------------------------------------------------------------------------
       101 shailaja
shailu@university.com

       102 sannihitha
himaja@university.com

       103 ramalaxmi
ramalaxmi@university.com


       SID FIRSTNAME
---------- --------------------------------------------------
EMAIL
--------------------------------------------------------------------------------
       104 shiva
shiva@university.com

       105 ramya
ramya@university.com

       106 madhu
```

8. Delete the details of students who have a CGPA below 5.0.

```
SQL> delete from student_2155 where cgpa<5.0;

0 rows deleted.
```

9. Increment the Scholarship by 10% for students who have a CGPA above 9.0.

```
SQL> update student_2155 set scholarship=scholarship*0.1 where cgpa>9.0;

2 rows updated.
```

```
SQL> select sid,firstname,dept from student_2155 where cgpa>9.0;

       SID FIRSTNAME
---------- --------------------------------------------------
DEPT
--------------------------------------------------
       101 shailaja
cse

       105 ramya
CIVIL
```

10. Delete the students who are in the CSE department and have a CGPA below 6.0.

```
SQL> delete from student_2155 where dept='CSE' AND cgpa<6.0;

0 rows deleted.

SQL>
```

QUESTION-3

3.create a product table with the following fields : product_ID ,ProductName,Category, Quantity, Price, Supplier, and Manufacture Date.

Queries:

1.Create the Schema/structure for the product table.

```
SQL> create table product2155(pid number(3),pname varchar2(50),category varc
har2(50),quantity number(10),price number(10),supplier varchar2(50),manfactu
re number(20));

Table created.
```

2. Insert at least 6 records in to the product table.

```
SQL> insert into product2155 values(&pid,'&pname','&category','&quantity',&p
rice,'&supplier','&manufacture');
Enter value for pid: 101
Enter value for pname: santoor
Enter value for category: cleansing
Enter value for quantity: 30gm
Enter value for price: 35
Enter value for supplier: sahasra
Enter value for manufacture: 20-oct-23
old   1: insert into product2155 values(&pid,'&pname','&category','&quantity
',&price,'&supplier','&manufacture')
new   1: insert into product2155 values(101,'santoor','cleansing','30gm',35,
'sahasra','20-oct-23')

1 row created.
```

```
SQL> /
Enter value for pid: 102
Enter value for pname: Air conditioner
Enter value for category: Electronics
Enter value for quantity: 6kgs
Enter value for price: 40000
Enter value for supplier: Bajaj
Enter value for manufacture: 26-jan-25
old   1: insert into product2155 values(&pid,'&pname','&category','&quantity
',&price,'&supplier','&manufacture')
new   1: insert into product2155 values(102,'Air conditioner','Electronics',
'6kgs',40000,'Bajaj','26-jan-25')

1 row created.

SQL> /
Enter value for pid: 103
Enter value for pname: saree
Enter value for category: clothing
Enter value for quantity: 1
Enter value for price: 5000
Enter value for supplier: swamy
Enter value for manufacture: 23-feb-22
old   1: insert into product2155 values(&pid,'&pname','&category','&quantity
',&price,'&supplier','&manufacture')
new   1: insert into product2155 values(103,'saree','clothing','1',5000,'swa
my','23-feb-22')

1 row created.
```

```
SQL> /
Enter value for pid: 104
Enter value for pname: Dressing table
Enter value for category: Furniture
Enter value for quantity: 1
Enter value for price: 10000
Enter value for supplier: Govardhan
Enter value for manufacture: 4-mar-27
old   1: insert into product2155 values(&pid,'&pname','&category','&quantity
',&price,'&supplier','&manufacture')
new   1: insert into product2155 values(104,'Dressing table','Furniture','1'
,10000,'Govardhan','4-mar-27')

1 row created.

SQL> /
Enter value for pid: 201
Enter value for pname: Eyeliner
Enter value for category: Make-up
Enter value for quantity: 3
Enter value for price: 50
Enter value for supplier: Radhika
Enter value for manufacture: 12-jun-28
old   1: insert into product2155 values(&pid,'&pname','&category','&quantity
',&price,'&supplier','&manufacture')
new   1: insert into product2155 values(201,'Eyeliner','Make-up','3',50,'Rad
hika','12-jun-28')

1 row created.
```

```
SQL> /
Enter value for pid: 202
Enter value for pname: door
Enter value for category: Furniture
Enter value for quantity: 1
Enter value for price: 15000
Enter value for supplier: sloka
Enter value for manufacture: 17-jul-29
old   1: insert into product2155 values(&pid,'&pname','&category','&quantity
',&price,'&supplier','&manufacture')
new   1: insert into product2155 values(202,'door','Furniture','1',15000,'sl
oka','17-jul-29')

1 row created.
```

```
       104 Dressing table
Furniture                                          1              10000

       PID PNAME
---------- --------------------------------------------------
CATEGORY                                           QUANTITY        PRICE
-------------------------------------------------- ---------- ----------
SUPPLIER                                           MANFACTUR
-------------------------------------------------- ---------
Govardhan                                          04-MAR-27

       201 Eyeliner
Make-up                                            3                  50
Radhika                                            12-JUN-28

       202 door

       PID PNAME
---------- --------------------------------------------------
CATEGORY                                           QUANTITY        PRICE
-------------------------------------------------- ---------- ----------
SUPPLIER                                           MANFACTUR
-------------------------------------------------- ---------
Furniture                                          1              15000
sloka                                              17-JUL-29

       203 lehenga
clothing                                           3               4000
Tara                                               08-AUG-19


7 rows selected.
```

3.Retrieve the Product name and Price of all products.

```
SQL> select pname,price from product2155;

PNAME                                                   PRICE
-------------------------------------------------- ----------
santoor                                                    35
Air conditioner                                         40000
saree                                                    5000
Dressing table                                          10000
Eyeliner                                                   50
door                                                    15000
lehenga                                                  4000

7 rows selected.
```

4.Retrive the products that belong to the electronics category.

```
SQL> select * from product2155 where category='Electronics';

       PID PNAME
---------- --------------------------------------------------
CATEGORY                                           QUANTITY        PRICE
-------------------------------------------------- ---------- ----------
SUPPLIER                                           MANFACTUR
-------------------------------------------------- ---------
       102 Air conditioner
Electronics                                        6kgs            40000
Bajaj                                              26-JAN-25
```

5.Retrieve the Product_ID of products whose category is Furniture and price is above 10,000.

```
SQL> select pid from product2155 where category='Furniture' AND price=10000;


       PID
----------
       104
```

6.Update the Quantity of the product with product_ID =201 to 50

```
SQL> update product2155 set pid=50 where pid=201;

1 row updated.

SQL> select * from product2155 where pid=50;

       PID PNAME
---------- --------------------------------------------------
CATEGORY                                           QUANTITY        PRICE
-------------------------------------------------- ---------- ----------
SUPPLIER                                           MANFACTUR
-------------------------------------------------- ---------
       50 Eyeliner
Make-up                                            3                  50
Radhika                                            12-JUN-28
```

7.Add a new column called discount and set the discount for all products in the clothing category to 15%

```
SQL> update product2155 set discount=price*0.15 where category='clothing';

2 rows updated.

SQL> select category,discount from product2155;

CATEGORY                                            DISCOUNT
-------------------------------------------------- ----------
cleansing
Electronics
clothing                                                750
Furniture
Make-up
Furniture
clothing                                                600

7 rows selected.
```

After removing the discounted price from original price

```
SQL> alter table product2155
  2  add totamount number(8);

Table altered.

SQL> update product2155 set totamount=price-discount where category='clothin
g';

2 rows updated.

SQL> select category,totamount from product2155;

CATEGORY                                           TOTAMOUNT
-------------------------------------------------- ----------
cleansing
Electronics
clothing                                                4250
Furniture
Make-up
Furniture
clothing                                                3400

7 rows selected.

SQL>
```

8.Delete the products that were manufactured before 2020-01-01.

```
SQL> DELETE from product2155 where manfacture<'01-jan-2020';

1 row deleted.
```

```
SQL> select pid,pname,manfacture from product2155;

       PID PNAME                                              MANFACTUR
---------- -------------------------------------------------- ---------
       101 santoor                                            20-OCT-23
       102 Air conditioner                                    26-JAN-25
       103 saree                                              23-FEB-22
       104 Dressing table                                     04-MAR-27
        50 Eyeliner                                           12-JUN-28
       202 door                                               17-JUL-29

6 rows selected.
```

9.Increment the price by 8% for the products in the electronics category.

```
SQL> update product2155 set price=price+(price*0.08) where category='Electro
nics';

1 row updated.

SQL> select category,price from product2155;

CATEGORY                                             PRICE
-------------------------------------------------- ----------
cleansing                                              35
Electronics                                         43200
clothing                                             5000
Furniture                                           10000
Make-up                                                50
Furniture                                           15000

6 rows selected.
```

10.Delete the products that have a Quantity below 10 and price below 500.

```
SQL> DELETE from product2155 where quantity<10 AND totalamount<500;

1 row deleted.

SQL> select pid from product2155;

       PID
----------
       101
       102
       103
       104
        50
       202

6 rows selected.
```

QUESTION-4

Create and Orders table with the following fields:

Order_ID,CustomerName,ProductName,OrderDate,Quantity,PricePer unit,and Status.

Queries:

1.Create schema/structure for the orders table.

```
SQL> create table order2155(oid number(3),cname varchar2(50),pname varchar2(
50),odate Date,quantity number(10),priceunit number(20),status varchar2(50))
;

Table created.
```

2. Insert at least 7 records in to the orders table.

```
SQL> insert into order2155 values(&oid,'&cname','&pname','&odate',&quantity,
'&priceunit','&status');
Enter value for oid: 102
Enter value for cname: shailaja
Enter value for pname: books
Enter value for odate: 02-feb-06
Enter value for quantity: 3
Enter value for priceunit: 35
Enter value for status: cancelled
old   1: insert into order2155 values(&oid,'&cname','&pname','&odate',&quant
ity,'&priceunit','&status')
new   1: insert into order2155 values(102,'shailaja','books','02-feb-06',3,'
35','cancelled')

1 row created.

SQL> /
Enter value for oid: 103
Enter value for cname: himaja
Enter value for pname: flower
Enter value for odate: 03-mar-07
Enter value for quantity: 5
Enter value for priceunit: 77
Enter value for status: pending
old   1: insert into order2155 values(&oid,'&cname','&pname','&odate',&quant
ity,'&priceunit','&status')
new   1: insert into order2155 values(103,'himaja','flower','03-mar-07',5,'7
7','pending')

1 row created.
```

```
SQL> /
Enter value for oid: 301
Enter value for cname: rama
Enter value for pname: pen
Enter value for odate: 04-apr-08
Enter value for quantity: 6
Enter value for priceunit: 99
Enter value for status: pending
old   1: insert into order2155 values(&oid,'&cname','&pname','&odate',&quant
ity,'&priceunit','&status')
new   1: insert into order2155 values(301,'rama','pen','04-apr-08',6,'99','p
ending')

1 row created.
```

```
SQL> /
Enter value for oid: 104
Enter value for cname: charan
Enter value for pname: kajal
Enter value for odate: 05-may-25
Enter value for quantity: 8
Enter value for priceunit: 100
Enter value for status: cancelled
old   1: insert into order2155 values(&oid,'&cname','&pname','&odate',&quant
ity,'&priceunit','&status')
new   1: insert into order2155 values(104,'charan','kajal','05-may-25',8,'10
0','cancelled')

1 row created.

SQL> /
Enter value for oid: 105
Enter value for cname: swamy
Enter value for pname: laptop
Enter value for odate: 06-jun-26
Enter value for quantity: 10
Enter value for priceunit: 300
Enter value for status: completed
old   1: insert into order2155 values(&oid,'&cname','&pname','&odate',&quant
ity,'&priceunit','&status')
new   1: insert into order2155 values(105,'swamy','laptop','06-jun-26',10,'3
00','completed')

1 row created.
```

```
SQL> /
Enter value for oid: 302
Enter value for cname: raghu
Enter value for pname: speaker
Enter value for odate: 07-jul-27
Enter value for quantity: 3
Enter value for priceunit: 400
Enter value for status: completed
old   1: insert into order2155 values(&oid,'&cname','&pname','&odate',&quant
ity,'&priceunit','&status')
new   1: insert into order2155 values(302,'raghu','speaker','07-jul-27',3,'4
00','completed')

1 row created.
```

3.Retrieve the customer Name ,Product Name ,and Quantity of all orders.

```
SQL> select cname,pname,quantity from order2155;

CNAME
--------------------------------------------------
PNAME                                              QUANTITY
-------------------------------------------------- ----------
shiva
santoor                                                     4

shailaja
books                                                       3

himaja
flower                                                      5


CNAME
--------------------------------------------------
PNAME                                              QUANTITY
-------------------------------------------------- ----------
rama
pen                                                         6

charan
kajal                                                       8

swamy
laptop                                                     10


CNAME
--------------------------------------------------
PNAME                                              QUANTITY
-------------------------------------------------- ----------
raghu
speaker                                                     3


7 rows selected.
```

4.Retrieve the orders placed after 2023-01-01.

```
SQL> select oid,pname from order2155 where odate> '01-jan-23';

       OID PNAME
---------- --------------------------------------------------
       104 kajal
       105 laptop
       302 speaker
```

5. Retrieve the order_ID and customer Name for orders where the status is pending.

```
SQL> select oid,cname from order2155 where status='pending';

       OID CNAME
---------- --------------------------------------------------
         1 shiva
       103 himaja
       301 rama
```

6.update the status to completed for the order with order_ID=301.

```
SQL> update order2155 set status='completed' where oid=301;

1 row updated.

SQL> select oid,status from order2155;

       OID STATUS
---------- --------------------------------------------------
         1 pending
       102 cancelled
       103 pending
       301 completed
       104 cancelled
       105 completed
       302 completed

7 rows selected.
```

7.Add a new column called TotalAmount and calculate it as Quantity*priceunit for all rows.

```
SQL> select oid,priceunit,TotalAmount from order2155;

       OID  PRICEUNIT TOTALAMOUNT
---------- ---------- -----------
         1         40         160
       102         35         105
       103         77         385
       301         99         594
       104        100         800
       105        300        3000
       302        400        1200

7 rows selected.
```

8.Delete orders where the quantity is less than 5.

```
SQL> DELETE from order2155 where quantity<5;

3 rows deleted.
```

```
SQL> select oid,pname,quantity from order2155;

       OID PNAME                                              QUANTITY
---------- -------------------------------------------------- ----------
       103 flower                                                      5
       301 pen                                                         6
       104 kajal                                                       8
       105 laptop                                                     10

SQL>
```

9. Increase the price unit by 10% for orders where the product name is laptop

```
SQL> update order2155 set priceunit=priceunit+(priceunit*0.1) where pname='l
aptop';

1 row updated.
```

```
SQL> select pname,priceunit from order2155;

PNAME                                              PRICEUNIT
-------------------------------------------------- ----------
flower                                                     77
pen                                                        99
kajal                                                     100
laptop                                                    330

SQL>
```

10. Delete the orders where the status is Cancelled.

```
SQL> DELETE from order2155 where status='cancelled';

1 row deleted.

SQL> select oid,pname,cname,status from order2155;

       OID PNAME
---------- --------------------------------------------------
CNAME
--------------------------------------------------
STATUS
--------------------------------------------------
       103 flower
himaja
pending

       301 pen
rama
completed

       OID PNAME
---------- --------------------------------------------------
CNAME
--------------------------------------------------
STATUS
--------------------------------------------------

       105 laptop
swamy
completed
```

QUESTION-5

5.create Library table with the following fields:

Book_ID, Title, Author, Genre, Published Year, Copies Available, and price.

Queries:

1.create the schema/structure for the library table.

```
SQL> create table library2155(bid number(3),title varchar2(50),author varcha
r2(50),genre varchar2(50), publishedyear number(10),availcopies number(10),p
rice number(10));

Table created.
```

2.Insert at least 8 records in to library table.

```
SQL> insert into library2155 values(&bid,'&title','&author','&genre',&publis
hedyear,&availcopies,&price);
Enter value for bid: 401
Enter value for title: DBMS
Enter value for author: EF.codd
Enter value for genre: engineering
Enter value for publishedyear: 1990
Enter value for availcopies: 3
Enter value for price: 100
old   1: insert into library2155 values(&bid,'&title','&author','&genre',&pu
blishedyear,&availcopies,&price)
new   1: insert into library2155 values(401,'DBMS','EF.codd','engineering',1
990,3,100)

1 row created.

SQL> /
Enter value for bid: 402
Enter value for title: nervous system
Enter value for author: john
Enter value for genre: biology
Enter value for publishedyear: 1888
Enter value for availcopies: 13
Enter value for price: 200
old   1: insert into library2155 values(&bid,'&title','&author','&genre',&pu
blishedyear,&availcopies,&price)
new   1: insert into library2155 values(402,'nervous system','john','biology
',1888,13,200)

1 row created.
```

```
SQL> /
Enter value for bid: 403
Enter value for title: avatar
Enter value for author: michael
Enter value for genre: fiction
Enter value for publishedyear: 2020
Enter value for availcopies: 8
Enter value for price: 500
old   1: insert into library2155 values(&bid,'&title','&author','&genre',&pu
blishedyear,&availcopies,&price)
new   1: insert into library2155 values(403,'avatar','michael','fiction',202
0,8,500)

1 row created.

SQL> /
Enter value for bid: 404
Enter value for title: vettiayan
Enter value for author: atlee
Enter value for genre: action
Enter value for publishedyear: 2023
Enter value for availcopies: 5
Enter value for price: 600
old   1: insert into library2155 values(&bid,'&title','&author','&genre',&pu
blishedyear,&availcopies,&price)
new   1: insert into library2155 values(404,'vettiayan','atlee','action',202
3,5,600)

1 row created.
```

```
SQL> /
Enter value for bid: 405
Enter value for title: the plants
Enter value for author: thomas
Enter value for genre: science
Enter value for publishedyear: 1994
Enter value for availcopies: 16
Enter value for price: 700
old   1: insert into library2155 values(&bid,'&title','&author','&genre',&pu
blishedyear,&availcopies,&price)
new   1: insert into library2155 values(405,'the plants','thomas','science',
1994,16,700)

1 row created.

SQL> /
Enter value for bid: 406
Enter value for title: love bird
Enter value for author: renuk
Enter value for genre: love
Enter value for publishedyear: 2014
Enter value for availcopies: 0
Enter value for price: 88
old   1: insert into library2155 values(&bid,'&title','&author','&genre',&pu
blishedyear,&availcopies,&price)
new   1: insert into library2155 values(406,'love bird','renuk','love',2014,
0,88)

1 row created.
```

```
SQL> /
Enter value for bid: 407
Enter value for title: sakranthi
Enter value for author: raju
Enter value for genre: family drama
Enter value for publishedyear: 1885
Enter value for availcopies: 2
Enter value for price: 100
old   1: insert into library2155 values(&bid,'&title','&author','&genre',&pu
blishedyear,&availcopies,&price)
new   1: insert into library2155 values(407,'sakranthi','raju','family drama
',1885,2,100)

1 row created.

SQL> /
Enter value for bid: 408
Enter value for title: pushpa
Enter value for author: sukumar
Enter value for genre: action
Enter value for publishedyear: 2025
Enter value for availcopies: 100
Enter value for price: 1000
old   1: insert into library2155 values(&bid,'&title','&author','&genre',&pu
blishedyear,&availcopies,&price)
new   1: insert into library2155 values(408,'pushpa','sukumar','action',2025
,100,1000)

1 row created.
```

3.Retrieve the Title, Author, and price of all books.

```
SQL> select title,author,price from library2155;

TITLE
--------------------------------------------------
AUTHOR                                             PRICE
-------------------------------------------------- ----------
DBMS
EF.codd                                               100

nervous system
john                                                  200

avatar
michael                                               500


TITLE
--------------------------------------------------
AUTHOR                                             PRICE
-------------------------------------------------- ----------
vettiayan
atlee                                                 600

the plants
thomas                                                700

love bird
renuk                                                  88


TITLE
--------------------------------------------------
AUTHOR                                             PRICE
-------------------------------------------------- ----------
sakranthi
raju                                                  100

pushpa
sukumar                                              1000
```

4.Retrieve the books in the Fiction genre.

```
SQL> select bid,genre from library2155 where genre='fiction';

       BID GENRE
---------- --------------------------------------------------
       403 fiction
```

5.Retrieve the Book_ID of books published before the year 2000.

```
SQL> select bid from library2155 where publishedyear<2000;

       BID
----------
       401
       402
       405
       407
```

6.Update the CopiesAvailable to 10 for the book with Book_ID=401.

```
SQL> update library2155 set availcopies=10 where bid=401;

1 row updated.

SQL> select bid,availcopies from library2155;

       BID AVAILCOPIES
---------- -----------
       401          10
       402          13
       403           8
       404           5
       405          16
       406           0
       407           2
       408         100

8 rows selected.
```

7.Add a new column called Discount and set a 20% discount for books in the science genre.

```
SQL> alter table library2155
  2  add Discount number(10);

Table altered.

SQL> update library2155 set discount= price-(price*0.02) where genre='scienc
e';

1 row updated.

SQL> select bid,genre,discount from library2155;

       BID GENRE                                              DISCOUNT
---------- -------------------------------------------------- ----------
       401 engineering
       402 biology
       403 fiction
       404 action
       405 science                                               686
       406 love
       407 family drama
       408 action

8 rows selected.
```

8. Delete the books with copiesAvailable equal to 0.

```
SQL> DELETE from library2155 where availcopies=0;

1 row deleted.

SQL> select bid,availcopies from library2155;

       BID AVAILCOPIES
---------- -----------
       401          10
       402          13
       403           8
       404           5
       405          16
       407           2
       408         100

7 rows selected.
```

9.Increment the price of books published after 2015 by 5%.

```
SQL> update library2155 set price=price+(price*0.05) where publishedyear>201
5;

3 rows updated.

SQL> select bid,price,publishedyear from library2155;

       BID      PRICE PUBLISHEDYEAR
---------- ---------- -------------
       401        100          1990
       402        200          1888
       403        525          2020
       404        630          2023
       405        700          1994
       407        100          1885
       408       1050          2025

7 rows selected.
```

10.Delete the books with Price below 300 and published before the year 1990.

```
SQL> DELETE from library2155 where price<300 AND publishedyear<1990;

2 rows deleted.
```

```
SQL> select bid,price,publishedyear from library2155;

       BID      PRICE PUBLISHEDYEAR
---------- ---------- -------------
       401        100          1990
       403        525          2020
       404        630          2023
       405        700          1994
       408       1050          2025

SQL>
```