PROGRAM-1

Aim: To create a database for student details and perform basic operations.

create table stud(id number(3),name varchar(15),course varchar(15),college varchar(15));

select \* from stud;

ID NAME COURSE COLLEGE

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

100 sunitha msccs assumption

101 athira msccs assumption

102 nissiya msccs assumption

103 anu msccs assumption

104 rini msccs assumption

105 daya mscphy marivanios

**1. Find the name of students starts with letter ‘A’?**

select name from stud where name like 'a%';

NAME

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

athira

anu

**2. Find the student details who studying in ‘assumption’?**

Select \*from student where college=’assumption’;

ID NAME COURSE COLLEGE

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

100 sunitha msccs assumption

101 athira msccs assumption

103 anu msccs assumption

104 rini msccs assumption

**3. Update the course MSc to BSc of student having id=102?**

update stud set course= 'bsc' where id=102;

select \* from stud;

ID NAME COURSE COLLEGE

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

100 sunitha msccs assumption

101 athira msccs assumption

102 nissiya bsc assumption

103 anu msccs assumption

104 rini msccs assumption

105 daya mscphy marivanios

**4. Modifying id field of student table as number(4)?**

alter table stud modify(id number(4));

Table altered.

**5. Add a new coloumn as contact?**

alter table stud add contact number(10);

Table altered.

ID NAME COURSE COLLEGE CONTACT

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

100 sunitha msccs assumption

101 athira msccs assumption

102 nissiya bsc assumption

103 anu msccs assumption

104 rini msccs assumption

105 daya mscphy marivanios

**6. Delete the coloumn contact?**

alter table stud drop column contact;

Table altered.

ID NAME COURSE COLLEGE

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

100 sunitha msccs assumption

101 athira bsc assumption

102 nissiya msccs assumption

103 anu msccs assumption

104 rini msccs assumption

105 daya mscphy marivanios

**7. Delete a row from student where student name as ‘nissiya’?**

delete from stud where name='nissiya';

1 row deleted.

select \* from stud;

ID NAME COURSE COLLEGE

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

100 sunitha msccs assumption

101 athira msccs assumption

103 anu msccs assumption

104 rini msccs assumption

105 daya mscphy marivanios

**8. Delete the table student?**

drop table stud;

Table dropped.

PROGRAM-2

Aim: To create a database for student details and perform operations using extract and aggregate function.

create table stdnt(Rollno number(3),name varchar(10),class varchar(3),DOB date,Mark1 number(3),Mark2 number(3),Mark3 number(3));

select \* from stdnt;

ROLLNO NAME CLA DOB MARK1 MARK2 MARK3

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

100 sunitha sci 12-MAY-98 100 100 98

101 athira sci 12-MAY-99 99 100 98

102 athira sci 11-MAY-00 99 95 98

1. thomas sci 11-APR-99 90 95 98

104 jova phy 01-APR-97 90 93 98

**1. Display the details of student whose dob is after 1999?**

Select\* from stdnt where dob>='01-jan-2000';

ROLLNO NAME CLA DOB MARK1 MARK2 MARK3

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

102 athira sci 11-MAY-00 99 95 98

**2. Delete records having name contain thomas?**

delete from stdnt where name='thomas';

1 row deleted.

select \* from stdnt;

ROLLNO NAME CLA DOB MARK1 MARK2 MARK3

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

100 sunitha sci 12-MAY-98 100 100 98

101 athira sci 12-MAY-99 99 100 98

102 athira sci 11-MAY-00 99 95 98

104 jova phy 01-APR-97 90 93 98

**3. Alter table to contain field total to have the total marks?**

alter table stdnt add(total number(3));

Table altered.

select \* from stdnt;

ROLLNO NAME CLA DOB MARK1 MARK2 MARK3 TOTAL

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

100 sunitha sci 12-MAY-98 100 100 98

101 athira sci 12-MAY-99 99 100 98

102 athira sci 11-MAY-00 99 95 98

104 jova phy 01-APR-97 90 93 98

update stdnt set total=Mark1+Mark2+Mark3;

4 rows updated.

select \* from stdnt;

ROLLNO NAME CLA DOB MARK1 MARK2 MARK3 TOTAL

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

100 sunitha sci 12-MAY-98 100 100 98 298

101 athira sci 12-MAY-99 99 100 98 297

102 athira sci 11-MAY-00 99 95 98 292

104 jova phy 01-APR-97 90 93 98 281

select name,max(total) as max\_mark from stdnt group by name;

NAME MAX\_MARK

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

jova 281

sunitha 298

athira 297

**4. Display details of student having minimum and maximum total but total greater than 200?**

select \* from stdnt where total in ((select min (total) from stdnt where total>200) union (select max(total) from stdnt where total>200));

ROLLNO NAME CLA DOB MARK1 MARK2 MARK3 TOTAL

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

100 sunitha sci 12-MAY-98 100 100 98 298

104 jova phy 01-APR-97 90 93 98 281

**5. Display no: of students in each class?**

select class ,count(rollno) as no\_of\_student from stdnt group by class;

CLA NO\_OF\_STUDENT

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

sci 3

phy 1

**6. display student details begin with letter s?**

select \* from stdnt where name like 's%';

ROLLNO NAME CLA DOB MARK1 MARK2 MARK3 TOTAL

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

100 sunitha sci 12-MAY-98 100 100 98 298

PROGRAM-3

Aim: To create a database for employee details.

create table empl (empid number(2),name varchar(15),salary number(5),dob date,job varchar(15));

select \* from empl;

EMPID NAME SALARY DOB JOB

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

10 sunitha 25000 12-MAY-90 teacher

11 anu 25000 12-JAN-74 teacher

12 rini 25000 12-JAN-89 clerk

13 neethu 9000 12-JAN-80 teacher

14 jova 30000 17-JUL-78 teacher

15 thomas 10000 07-APR-30 teacher

**1.Display the details of employee whose dob is after 1975?**

select \* from empl where dob>='31-dec-1975';

EMPID NAME SALARY DOB JOB

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

10 sunitha 25000 12-MAY-90 teacher

12 rini 25000 12-JAN-89 clerk

13 neethu 9000 12-JAN-80 teacher

14 jova 30000 17-JUL-78 teacher

**2.Delete records having name contains ‘thomas’?**

delete from empl where name='thomas';

1 row deleted.

select \* from empl;

EMPID NAME SALARY DOB JOB

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

10 sunitha 25000 12-MAY-90 teacher

11 anu 25000 12-JAN-74 teacher

12 rini 25000 12-JAN-89 clerk

13 neethu 9000 12-JAN-80 teacher

14 jova 30000 17-JUL-78 teacher

**3. Display the details of the employee whose dob between 1970 and 1985?**

select \* from empl where dob between '01-jan-1970' and '31-dec-1985';

EMPID NAME SALARY DOB JOB

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

11 anu 25000 12-JAN-74 teacher

13 neethu 9000 12-JAN-80 teacher

14 jova 30000 17-JUL-78 teacher

**4.Add a new coloumn for attribute DOJ?**

alter table empl add date\_of\_join date ;

Table altered.

select \* from empl;

EMPID NAME SALARY DOB JOB DATE\_OF\_JOIN

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

10 sunitha 25000 12-MAY-90 teacher

11 anu 25000 12-JAN-74 teacher

12 rini 25000 12-JAN-89 clerk

13 neethu 9000 12-JAN-80 teacher

14 jova 30000 17-JUL-78 teacher

**5. Display the details of the employee whose salary >10000 and JOB=’teacher’?**

select \* from empl where salary>10000 and job='teacher';

EMPID NAME SALARY DOB JOB DATE\_OF\_JOIN

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

10 sunitha 25000 12-MAY-90 teacher

11 anu 25000 12-JAN-74 teacher

14 jova 30000 17-JUL-78 teacher

**6. Update coloumn DOJ?**

update empl set date\_of\_join='12-may-2018' where empid=10;

1 row updated.

update empl set date\_of\_join='01-jan-1998' where empid=11;

1 row updated.

update empl set date\_of\_join='01-jan-2015' where empid=12;

1 row updated.

update empl set date\_of\_join='01-jan-2001' where empid=13;

1 row updated.

update empl set date\_of\_join='01-jan-1995' where empid=14;

1 row updated.

select \* from empl;

EMPID NAME SALARY DOB JOB DATE\_OF\_JOIN

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

10 sunitha 25000 12-MAY-90 teacher 12-MAY-18

11 anu 25000 12-JAN-74 teacher 01-JAN-98

12 rini 25000 12-JAN-89 clerk 01-JAN-15

13 neethu 9000 12-JAN-80 teacher 01-JAN-01

14 jova 30000 17-JUL-78 teacher 01-JAN-95

**7. Calculate the experience of all employee?**

select empid,name,to\_char(round((sysdate-date\_of\_join)/365))"experience" from empl;

EMPID NAME experience

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

10 sunitha 1

11 anu 21

12 rini 4

13 neethu 18

14 jova 24

select \* from empl;

EMPID NAME SALARY DOB JOB DATE\_OF\_JOIN

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

10 sunitha 25000 12-MAY-90 teacher 12-MAY-18

11 anu 25000 12-JAN-74 teacher 01-JAN-98

12 rini 25000 12-JAN-89 clerk 01-JAN-15

13 neethu 9000 12-JAN-80 teacher 01-JAN-01

14 jova 30000 17-JUL-78 teacher 01-JAN-95

PROGRAM-4

Aim: To create a database for salesperson, customer and order perform related queries.

create table salesperson(sid number(4),name varchar(10),age number(3),salary number(6));

create table customer(cid number(4),name varchar(10),city varchar(10),industrytype varchar(10));

create table orders(num number(3),orderdate date,cid number(4),sid number(4),amount number(5))

select \* from salesperson;

SID NAME AGE SALARY

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

1 sunitha 25 100000

2 jova 27 200000

3 daya 24 30000

4 lena 26 90000

select \* from customer;

CID NAME CITY INDUSTRYTY

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

11 leela kochi samsonic

12 mano kottayam samsung

13 sujith kottayam samsonic

14 sugu kollam lenovo

select \* from orders;

NUM ORDERDATE CID SID AMOUNT

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

1 20-MAR-98 11 1 4000

2 20-JAN-02 12 2 5000

3 18-MAY-09 13 3 7000

4 01-APR-10 14 4 6000

**1. Display names of all salesperson that have an order with ‘samsonic’?**

select distinct name from salesperson s,orders o where s.sid in(select sid from orders o,customer c where c.industrytype='samsonic' and o.cid=c.cid);

NAME

----------

daya

sunitha

**2. Display the names of all sales person that do not have an order with’samsonic’?**

select distinct name from salesperson s,orders o where s.sid not in(select sid from orders o,customer c where c.industrytype='samsonic' and o.cid=c.cid);

NAME

----------

jova

lena

**3. Give the SQL statement to insert rows into a table called highachiever(name, age) where a sales person must have a salary of 1lakh grater to be included in the table?**

create view highachieve as (select name,age from salesperson where salary>100000);

View created.

select \* from highachieve;

NAME AGE

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

jova 27

PROGRAM-5

Aim: To create a database store, product and purchase and perform following queries.

create table stores (id number(2),storename varchar(20));

Table created.

select \* from stores;

ID STORENAME

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

1 trendz

2 lilly

3 marian

4 zion

create table products (productname varchar(20),unitprice number(2));

Table created.

select \*from products;

PRODUCTNAME UNITPRICE

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

book 20

paper 1

pen 5

box 25

tomato 30

potato 40

create table purchase(productname varchar(20),storeid number(2));

Table created.

select \* from purchase;

PRODUCTNAME STOREID

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

book 2

tomato 3

potato 4

pen 2

kurta 1

**1. Return the names of the stores that have atleast one product in their inventories whose unit price>2?**

SQL> select distinct storename from stores where id in(select distinct storeid from purchase where productname in(select distinct productname from products where unitprice>2));

STORENAME

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

marian

lilly

zion

**2. Return the names of the product with maximum unit price?**

select productname from products where unitprice=(select max(unitprice) from products);

PRODUCTNAME

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

potato

**3. Return the names of stores that have tomato and potato in their inventories?**

select distinct s.storename from stores s,purchase p where s.id=p.storeid and p.productname in('tomato','potato');

STORENAME

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

marian

zion

**4. Return the names of product whose unit price is below the average unit price of all product?**

select productname from products where unitprice<(select avg(unitprice) from products);

PRODUCTNAME

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

book

paper

pen

**5. Each store has an average unit price. It is the average of the unit prices of the product available at the store. Return average unit price of the store. Your query should produce pairs of store name and their average unit price?**

select s.storename,avg(unitprice) from stores s,purchase q,products p where s.id=q.storeid and p.productname=q.productname group by s.storename;

STORENAME AVG(UNITPRICE)

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

marian 30

lilly 12.5

zion 40

PROGRAM-6

Aim: To create database for store product and purchases and perform following queries.

create table emplo(id number(2),name varchar(15),deptid number(2));

Table created.

select \* from emplo;

ID NAME DEPTID

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

10 sunitha 1

13 lela 4

14 mano 5

11 libna 1

12 libin 3

create table designation(id number(2),designation varchar(15),salary number(5),deptid number(2),doj date);

Table created.

SQL> select \* from designation;

ID DESIGNATION SALARY DEPTID DOJ

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

10 manager 10000 1 12-JAN-98

11 manager 10000 1 12-JAN-98

12 clerk 10000 3 01-JAN-98

13 sales 5000 4 03-FEB-98

14 mechanic 4000 5 03-FEB-98

12 clerk 20000 3 01-JAN-98

12 clerk 40000 3 01-JAN-98

create table department(deptid number(2),deptname varchar(15));

Table created.

SQL> select \* from department;

DEPTI DEPTNAME

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

1 managerdept

3 management

4 sales

5 mechanical

**1. After department table to have experience field?**

alter table department add location number(3);

Table altered.

select \* from department;

DEPTID DEPTNAME LOCATION

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

1 managerdept

3 management

4 sales

5 mechanical

**2. Alter designation table to have experience field?**

alter table designation add experience number(3);

Table altered.

select \*from designation;

ID DESIGNATION SALARY DEPTID DOJ EXPERIENCE

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

10 manager 10000 1 12-JAN-98

11 manager 10000 1 12-JAN-98

12 clerk 10000 3 01-JAN-98

13 sales 5000 4 03-FEB-98

14 mechanic 4000 5 03-FEB-98

12 clerk 20000 3 01-JAN-98

12 clerk 40000 3 01-JAN-98

**3. Select name and salary of all managers?**

select name,salary from emplo natural join designation where designation='manager';

NAME SALARY

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

sunitha 10000

libna 10000

**4. Select name and designation with the highest salary?**

select name,designation from emplo natural join designation where salary=(select max(salary) from designation);

NAME DESIGNATION

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

libin clerk

**5. Display the number of rows in the table?**

select count(\*) as noofrows from emplo;

NOOFROWS

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

5

**6. Count the number of employee with less than 5000salary?**

select count(id) as number of employees from designation where salary<5000;

NUMBEROFEMPLOYEES

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

1

**7. Find the average salary of clerk?**

Select avg(salary) from designation where designation='clerk';

AVG(SALARY)

-----------

23333.3333

PROGRAM-7

Aim: To create a database for student details and perform following queries.

select \* from studs;

ROLLNO NAME

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

1 suni

2 jeni

3 iva

4 lela

select \* from marks;

ROLLNO MARK1 MARK2 MARK3 TOTAL PERCENTAGE

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

1 90 80 70 240 80

2 92 85 70 247 82

3 92 89 90 271 90

4 97 97 90 284 95

select \* from attend;

ROLLNO PERCENTAGE

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

1 100

2 99

4 94

3 80

**1. Display name and attendance of students?**

select s.name,a.percentage from studs s,attend a where s.rollno=a.rollno;

NAME PERCENTAGE

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

suni 100

jeni 99

lela 94

iva 80

**2. Select name and total of student with highermarks?**

select s.name,m.total from studs s,marks m where s.rollno=m.rollno and total in( select max(total) from marks);

NAME TOTAL

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

lela 284

**3. Select name of student with above 85%attendence?**

select s.name from studs s,attend a where s.rollno=a.rollno and a.percentage<95;

NAME

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

iva

lela

**4. Display the number of rows in the table?**

select count(\*) from studs;

COUNT(\*)

----------

4

**5. Count number of student with greater than 85%attendence?**

select s.name from studs s,attend a where s.rollno=a.rollno and a.percentage>85;

NAME

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

suni

jeni

lela

**5. Count number of student with lessthan 50%attendence?**

select count(\*) from attend a where a.percentage <50;

COUNT(\*)

----------

0

PROGRAM-8

Aim:To create a database for computer science department.

create table departt(deptid number(4),HOD varchar(20),contactno number(10));

Table created.

select \* from departt;

DEPTID HOD CONTACTNO

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

1111 linz tom 9089786554

1112 pourna 9799786554

1113 poorna 9792785754

create table teacher(emid number(3),name varchar(15),qualification varchar(20),doj date,status varchar(15));

Table created.

select \* from teacher;

EMID NAME QUALIFICATION DOJ STATUS

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

111 asifa msc.cs 01-JUN-90 permanant

112 asha msc.cs 01-JAN-90 permanant

113 asha mtech 01-JAN-00 permanant

114 ashna mtech 02-JAN-05 permanant

115 ashni me 02-JAN-15 temporary

116 shyni mca 02-JAN-19 temporary

117 jana mca,mtech 02-JAN-14 temporary

create table course(courseid number(4),coursename varchar(20),semester number(3));

Table created.

SQL> select \* from course;

COURSEID COURSENAME SEMESTER

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

1000 Msc.Cs 4

1001 Bsc.Cs 6

1002 BCA 6

create table coursede(classid number(4),courseid number(4),year number(4),no\_of\_student number(4),employeeid number(3));

Table created.

select \* from coursede;

CLASSID COURSEID YEAR NO\_OF\_STUDENT EMPLOYEEID

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

100 1000 2017 200 111

101 1001 2018 250 112

102 1001 2018 250 112

103 1002 2018 250 114

104 1000 2017 250 115

105 1000 2017 250 116

106 1002 2017 250 117

create table stdde(rollno number(10),classid number(4),name varchar(20),address varchar(20));

Table created.

SQL> select \* from stdde;

ROLLNO CLASSID NAME ADDRESS

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

301 100 liba idukki

302 101 jiba idukki

303 102 ziva kottayam

304 102 zarah kottayam

305 103 elza kollam

306 104 jova kollam

307 104 daya kollam

308 106 dayal kottayam

309 107 kayal kottayam

310 105 joal kottayam

create table sub (subjectcode number(2),classid number(4),subjectname varchar(20));

Table created.

SQL> select \* from sub;

SUBJECTCODE CLASSID SUBJECTNAME

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

20 100 c++

21 102 c

22 101 java

23 103 html

24 104 maths

25 104 graphics

26 105 android

27 105 asp

28 106 se

29 107 dbms

create table attendnce(rollno number(3),classid number(3),daypresent number(3),dayabsent number(3),grade varchar(2));

Table created.

select \* from attendnce;

ROLLNO CLASSID DAYPRESENT DAYABSENT GR

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

301 100 90 10 A

302 101 90 10 A

303 102 80 20 B

304 102 70 30 C

305 103 100 0 A+

306 104 100 0 A+

307 104 80 20 B

308 106 80 20 B

309 107 90 10 A

310 105 90 10 A

create table internal(rollno number(3),classid number(4),subjectcode number(3),grade varchar(20),assignment varchar(20),seminar varchar(20),test varchar(20),total varchar(20));

Table created.

select \* from internal;

ROLLNO CLASSID SUBJECTCODE GRADE ASSIGNMENT SEMINAR TEST TOTAL

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

301 100 20 A A B A A

302 101 22 A C B C B

303 102 21 B C B C B

304 102 21 C C B C C

305 103 23 A+ A B A A

306 104 24 A+ A B A A

307 104 25 B A B A A

308 106 28 B A B A A

309 107 29 A A B A A

310 105 27 A A B A A

**1.Find experience of each employee from the table teacher?**

select emid,name,to\_char(round((sysdate-doj)/365))"experience" from teacher;

EMID NAME experience

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

111 asifa 29

112 asha 30

113 asha 20

114 ashna 15

115 ashni 5

116 shyni 1

117 jana 6

7 rows selected.

**2. Display the details of teacher who’s Doj is after 2005?**

select name from teacher where doj>'01-jan-2005';

NAME

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

ashna

ashni

shyni

jana

3.Display the class\_id names of teacher in charge of each class from teacher and course details?

select c.classid,t.name from coursede c,teacher t where t.emid=c.employeeid;

CLASSID NAME

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

100 asifa

102 asha

101 asha

103 ashna

104 ashni

105 shyni

106 jana

**4. Display the name of student who get a grade for the internal assesment?**

select s.name from stdde s,internal i where s.classid=i.classid and i.grade='A';

NAME

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

liba

jiba

kayal

joal

**5. Find the subject names of first year degree student?**

select subjectname from sub where classid=105;

SUBJECTNAME

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

android

asp

**6. Display the details of student who present85 days or more?**

select s.rollno,s.name,s.classid,a.daypresent,a.grade from stdde s,attendnce a where s.rollno=a.rollno and a.daypresent>=85;

ROLLNO NAME CLASSID DAYPRESENT GR

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

301 liba 100 90 A

302 jiba 101 90 A

305 elza 103 10 0 A+

306 jova 104 100 A+

309 kayal 107 90 A

310 joal 105 90 A

**7. Find the internal details of all subject of student having roll number 3018?**

select \* from internal where rollno=308;

ROLLNO CLASSID SUBJECTCODE GRADE ASSIGNMENT SEMINAR TEST TOTAL

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

308 106 28 B A B A A