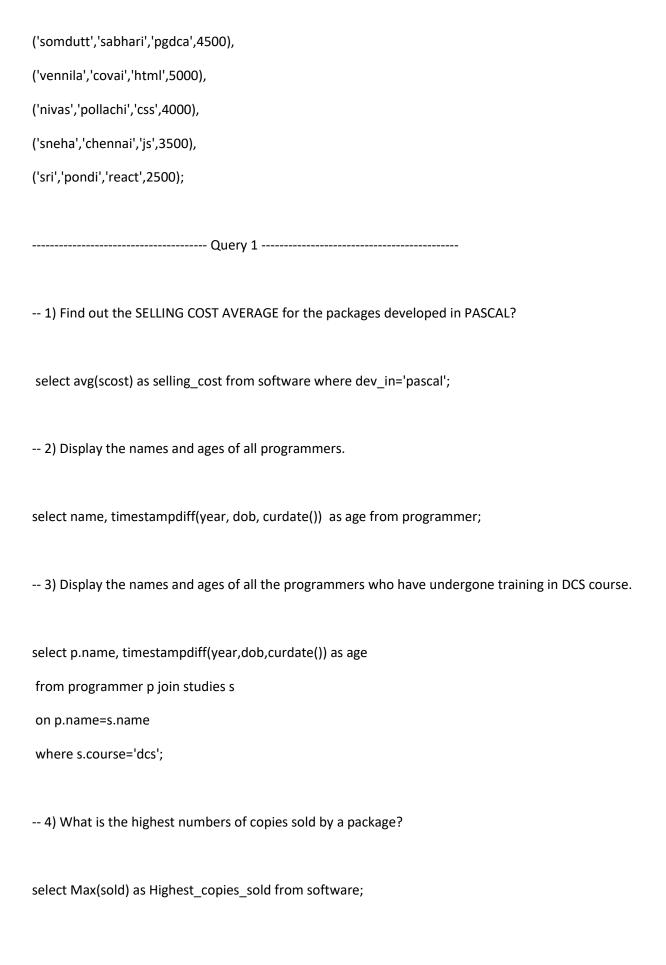
## **VENNILA.K**

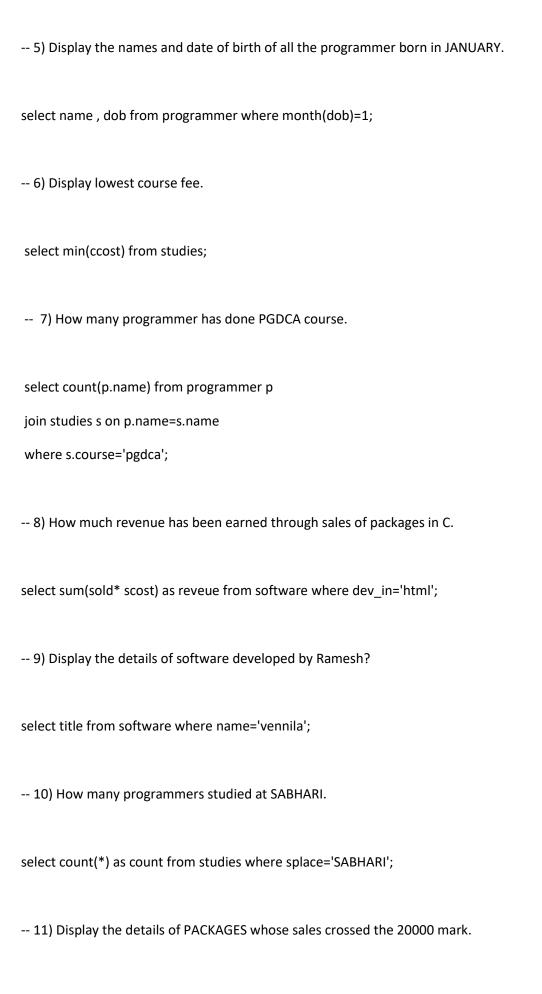
```
create database coe;
use coe;
-- create table programmer
create table Programmer(
name varchar(8) not null,
dob date not null,
doj date not null,
sex varchar(2) not null,
prof1 varchar(8),
prof2 varchar(8),
salary numeric(4)
);
-- insert values
INSERT INTO Programmer (name, dob, doj, sex, prof1, prof2, salary) VALUES
('somdutt', '1966-04-21', '1992-04-21', 'm', 'pascal', 'basic', 320),
('vennila','2002-10-03','2022-03-21','f','adhar','basic', 234);
INSERT INTO Programmer VALUES
('nivas','2002-12-12','2024-01-22','m','pan','pascal',999),
('vinuja','2001-05-22','2024-02-22','f','adhar','basic',444);
```

-- create table software

```
create table Software(
name varchar(8) not null,
title varchar(8) not null,
dev_in varchar(8) not null,
scost decimal(7,2),
dcost int,
sold int
);
insert into software values
('somdutt','system','basic',399.95,6000,43),
('vennila','web','html',398.95,5000,42),
('nivas', 'medical', 'css', 397.95, 4000, 41),
('sneha','booking','js',396.95,3000,40),
('sri','parking','react',395.95,2000,44);
-- create table studies
create table studies(
name varchar(8) not null,
splace varchar(9) not null,
course varchar(5) not null,
ccost varchar(5) not null
);
```

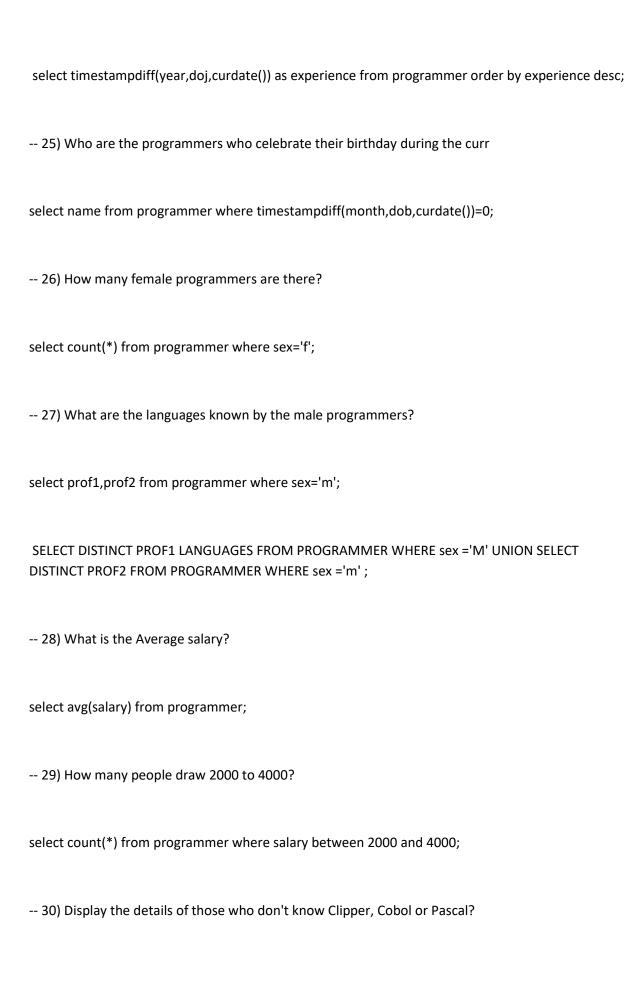
insert into studies values





select * from software where sold > 20000;
12) Find out the number of copies which should be sold in order to recover the development cost of each package.
SELECT ROUND (DCOST/SCOST) FROM SOFTWARE WHERE SCOST*SOLD <dcost;< td=""></dcost;<>
13) What is the price of the costliest software developed in BASIC?
select max(scost) as costliest from software;
14) Display the details of packages for which development cost has been recovered.
select * from software where scost*sold>dcost;
15) How many packages were developed in dbase?
select count(name) from software where dev_in='html';
16) How many programmers studies at paragathi?
select * from studies where splace="paragathi";
17) How many programmers paid 5000 to 10000 for their course?
select count(*) from studies where ccost between 1500 and 10000;

18) What is the average course fee
select avg(ccost) as avgfee from studies;
19) Display the details of programmers knowing c?
select * from programmer where prof1='pascel' or prof2='pascal';
20) How many programmers know either Cobol or Pascal?
select * from programmer where prof1 in ('cobol', 'pascal') or prof2 in ('cobol', 'pascal');
21) How many programmers don't know Pascal & C?
select count(*) from programmer where prof1 not in('pascal','cobol') and prof2 not in('pascel','cobol');
22) How old is the oldest male programmers?
select max( timestampdiff(year,dob,curdate())) from programmer where sex='m';
23) What is the average age of female programmers?
select avg(timestampdiff(year,dob,curdate())) from programmer where sex='f';
24) Calculate the experience in years for each programmers and display along with the names in descending order?

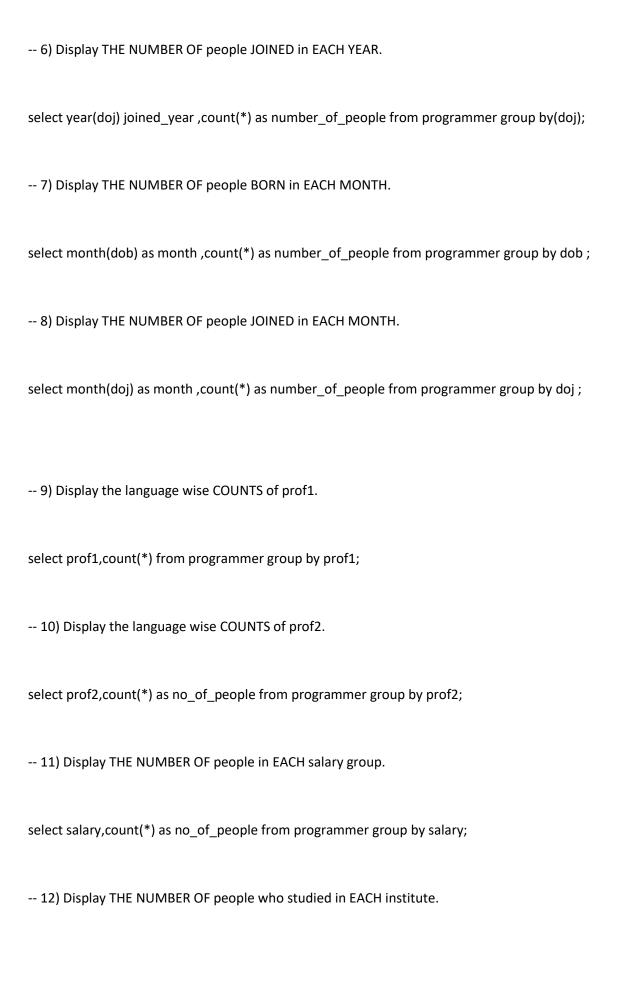




select title from software where sold=0;
37) Find out the cost of the software developed by Mary?
select scost from software where name='vennila';
38) Display the institute's names from the studies table without duplicates?
select distinct(splace) from studies;
39) How many different courses are mentioned in the studies table?
select count(distinct(course)) from studies;
40) Display the names of the programmers whose names contain 2 occurrences of the letter A?
select name from programmer where name like "%n%n" or name like "n%n" or name like "%nn%" or name like "n%n%";
41) Display the names of programmers whose names contain unto 5 characters?
select name from programmer where length(name)=5;
42) How many female programmers knowing COBOL have more than 2 years experience?
select count(*) from programmer where (prof1='cobol' or prof2='cobol') and sex='f' and timestampdiff(year,doj,curdate())>2;

43) What is the length of the shortest name in the programmer table?
select min(length(name)) from programmer;
44) What is the average development cost of a package developed in COBOL?
select avg(dcost) from software where dev_in='cobol';
45) Display the name, sex, dob (DD/MM/YY format), doj for all the programmers without using conversion function?
46) Who are the programmers who were born on the last day of the month?
select name from programmer where month(dob)=12 or day(dob)=31;
47) What is the amount paid in salaries of the male programmers who do not know Cobol?
select salary from programmer where sex='m' and prof1='cobol' or prof2='cobol';
48) Display the title, scost, dcost and difference between scost and dcost in descending order of difference?
select title,scost,dcost,(dcost-scost) as diff from software order by diff desc;
49) Display the name, dob, doj of those month of birth and month of joining are same?

select name,dob,doj from programmer where month(dob)=month(doj);
50) Display the names of the packages whose names contain more than 1 word?
select name from software where length(title)>1;
QUERIES - II
1) Display THE NUMBER OF packages developed in EACH language.
select dev_in as language ,count(*) from software group by dev_in;
2) Display THE NUMBER OF packages developed by EACH person.
select name,count(*) from software group by name;
3) Display THE NUMBER OF male and female programmer.
select sex,count(*) from programmer group by sex;
4) Display THE COSTLIEST packages and HIGEST selling developed in EACH language.
5) Display THE NUMBER OF people BORN in EACH YEAR.
select year(dob) as year ,count(*) as number_of_people from programmer group by year(dob);



```
select splace,count(*) as no_of_people from studies group by splace;
-- 13) Display THE NUMBER OF people who studied in EACH course.
select course, count(*) as no_of_people from studies group by course;
-- 14) Display the TOTAL development COST of the packages developed in EACH language.
select dev_in ,sum(dcost) as total_development_cost from software group by dev_in;
-- 15) Display the selling cost of the package developed in EACH language.
select dev_in ,sum(scost) from software group by dev_in;
-- 16) Display the cost of the package developed by EACH programmer.
select name, sum(scost) as cost from software group by name;
-- 17) Display the sales values of the package developed in EACH programmer.
select name,sum(scost*sold) as total_development_cost from software group by name;
-- 18) Display the NUMBER of packages developed by EACH programmer.
select name, count(title) as package from software group by name;
-- 19) Display the sales COST of packages developed by EACH programmer language wise.
```

select dev_in,sum(scost) from software group by dev_in;
20) Display EACH programmers name, costliest package and cheapest packages developed by Him/Her.
select name,max(scost),min(scost) from software group by name;
21) Display EACH language name with AVERAGE development cost, AVERAGE cost, selling cost and AVERAGE price per copy.
select dev_in,avg(dcost),avg(scost),avg(scost/sold) from software group by dev_in;
22) Display EACH institute name with NUMBER of courses, AVERAGE cost per course
select splace ,count(*) as course ,avg(ccost) from studies group by splace;
23) Display EACH institute name with NUMBER of students.
select splace ,count(name) as no_of_student from studies group by splace;
24) Display names of male and female programmers.
select name,sex from programmer group by sex;
25) Display the programmer's name and their packages.
select name, title from software order by name;

26) Display the NUMBER of packages in EACH language.
select dev_in,count(title) as no_of_package from software group by dev_in;
27) Display the NUMBER of packages in EACH language for which development cost is less than 1000.
select dev_in,count(*) from software where dcost <4000 group by dev_in;
28) Display the AVERAGE difference BETWEEN scost and dcost for EACH language.
select dev_in , avg(dcost-scost) as avg_between_scost_dcost from software group by dev_in;
29) Display the TOTAL scost, dcsot and amount TOBE recovered for EACH programmer for whose dcost HAS NOT YET BEEN recovered.
SELECT SUM(SCOST), SUM(DCOST), SUM(DCOST-(SOLD*SCOST)) FROM SOFTWARE GROUP BY NAME HAVING SUM(DCOST)>SUM(SOLD*SCOST);
30) Display highest, lowest and average salaries for THOSE earning MORE than 2000.
select name,avg(salary),min(salary),max(salary) from programmer where salary>300 group by name;
QUERIES - III

1) Who is the highest paid C programmer?
use coe;
SELECT * FROM PROGRAMMER
WHERE SALARY=(SELECT MAX(SALARY) FROM PROGRAMMER WHERE PROF1 LIKE 'C' OR PROF2 LIKE 'C');
2) Who is the highest paid female cobol programmer?
select * from programmer where salary in (Select max(salary) from programmer where prof1='cobol' or prof2='cobol' and sex='f');
3) Display the name of the HIGEST paid programmer for EACH language (prof1)
select name,prof1,salary from programmer where (prof1,salary) in (select max(salary),prof1 from programmer group by prof1);
4) Who is the LEAST experienced programmer?
select name,timestampdiff(year,doj,curdate()) as experience from programmer where timestampdiff(year,doj,curdate()) =(select min(timestampdiff(year,doj,curdate())) from programmer);
5) Who is the MOST experienced programmer?
select name,timestampdiff(year,doj,curdate()) as experience from programmer where timestampdiff(year,doj,curdate()) =(select max(timestampdiff(year,doj,curdate())) from programmer);

6) Which language is known by ONLY ONE programmer?
SELECT PROF1 FROM PROGRAMMER GROUP BY PROF1 HAVING PROF1 NOT IN (SELECT PROF2 FROM PROGRAMMER) AND COUNT(PROF1)=1
UNION
SELECT PROF2 FROM PROGRAMMER GROUP BY PROF2 HAVING PROF2 NOT IN (SELECT PROF1 FROM PROGRAMMER) AND COUNT(PROF2)=1;
7) Who is the YONGEST programmer knowing DBASE?
select name,prof1,prof2,timestampdiff(year,dob,curdate()) as age from programmer
where timestampdiff (year,dob,curdate()) =(select min(timestampdiff(year,dob,curdate())) from programmer where prof1='DBASE' or prof2='DBASE');
8) Which institute has MOST NUMBER of students?
select splace from studies group by splace having splace in (select max(splace) from studies group by splace);
9) Who is the above programmer?
doubt
10) Which female programmer earns MORE than 3000/- but DOES NOT know C, C++, Oracle or Dbase?
select name from programmer where sex='f' and salary>=3000 and (prof1 not in ('c','c++','oracle','dbase')) or (prof1 not in ('c','c++','oracle','dbase'));

11) Which is the COSTLIEST course?
select course,ccost from studies where ccost =(select max(ccost) from studies );
12) Which course has been done by MOST of the students?
select course from studies group by course having count(course) = (select max(count(course)) from studies group by course);
13) Display name of the institute and course Which has below AVERAGE course fee?
select splace, course from studies where ccost <(select avg(ccost) from studies);
14) Which institute conducts COSTLIEST course?
select splace, ccost from studies where ccost =(select max(ccost) from studies);
15) Which course has below AVERAGE number of students? //doubt
select course from studies group by course having count(course) <(select avg(course) from studies group by course);
16) Which institute conducts the above course?
17) Display names of the course WHOSE fees are within 1000(+ or -) of the AVERAGE fee.

18) Which package has the HIGEST development cost?
select title,dcost from software where dcost=(select max(dcost) from software);
19) Which package has the LOWEST selling cost?
select title,scost from software where scost =(select min(scost) from software);
20) Who developed the package, which has sold the LEAST number of copies?
select name, title, sold from software where sold=(select min(sold) from software);
21) Which language was used to develop the package WHICH has the HIGEST sales amount?
select dev_in,scost as highest_sales_amount from software where scost= (select max(scost) from software);
23) Which is the COSTLIEAST package developed in PASCAL?
select title,dev_in from software where dcost =(Select max(dcost) from software where dev_in='html');
24) Which language was used to develop the MOST NUMBER of package?
select dev_in from software group by dev_in having max(dev_in) = (select max(dev_in) from software );
25) Which programmer has developed the HIGEST NUMBER of package?

select name from software group by name having max(title) =(select max(title) from software);
26) Who is the author of the COSTLIEST package?
select name from software where dcost =(select max(dcost) from software);
27) Display names of packages WHICH have been sold LESS THAN the AVERAGE number of copies?
select title from software where sold < (select avg(sold) from software);
28) Who are the female programmers earning MORE than the HIGEST paid male programmers?
select name from programmer where sex='f' and salary > (Select max(salary) from programmer where sex='m');
29) Which language has been stated as prof1 by MOST of the programmers?
select prof1 from programmer group by prof1 having prof1=(select max(prof1) from programmer);
30) Who are the authors of packages, WHICH have recovered MORE THAN double the development cost?
select name from software where scost*sold > 2*dcost;
31) Display programmer names and CHEAPEST package developed by them in EACH language?
select name,dcost from software where dcost in (select min(dcost) from software group by dev_in);

32) Who is the YOUNGEST male programmer born in 1965?
select name from programmer where dob =(Select max(dob) from programmer where year(dob) like 2002);
33) Display language used by EACH programmer to develop the HIGEST selling and LOWEST selling package.
select name,max(sold),min(sold) from software group by name;
34) Who is the OLDEST female programmer WHO joined in 1992
select name from programmer where doj =(Select min(doj) from programmer where year(doj) like 1992);
35) In WHICH year where the MOST NUMBER of programmer born?
select year(dob) from programmer where year(dob)=(select max( year(dob)) from programmer);
36) In WHICH month did MOST NUMBRER of programmer join?
select month(doj) from programmer where month(doj)=(select max(month(doj)) from programmer); 38) Who are the male programmers earning BELOW the AVERAGE salary of female programmers?
select name from programmer where sex='m' and salary < (select avg(salary) from programmer where sex like 'f');