**ASSIGNMENT SQL QUERIES**

**TABLE 1:**

**PROGRAMMER:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| name | dob | doj | sex | prof1 | Prof2 | salary |
| aishwarya | 1972-09-11 | 1992-09-08 | f | dotnet | python | 2100 |
| ananthi | 1998-02-08 | 2016-04-01 | f | cobal | dbase | 4200 |
| aswini | 1998-01-09 | 2017-06-20 | f | pascal | dbase | 3400 |
| chandrika | 1981-09-29 | 1998-12-23 | f | c | pascal | 3700 |
| fathima | 1978-02-23 | 1998-12-23 | f | c | basic | 6000 |
| francis | 1956-01-31 | 1989-08-18 | m | cobal | java | 4200 |
| somdutt | 1965-09-09 | 1992-04-21 | m | pascal | c | 4600 |
| tom | 1998-07-22 | 2017-04-19 | m | pascal | basic | 3800 |
| yuvan | 1962-01-01 | 1992-01-02 | m | clipper | c++ | 3400 |
| xavier | 1965-01-22 | 2019-03-03 | m | cobal | basic | 4700 |

**TABLE 2:**

**SOFTWARE:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| name | title | dev\_in | scost | dcost | sold |
| aarav | pandora | cobal | 456.25 | 2230 | 9 |
| ajith | slack | dbase | 567.90 | 3435 | 0 |
| anitha | samdev | cobal | 345.60 | 2000 | 5 |
| francis | phoenix | pascal | 234.80 | 4555 | 23 |
| gowtham | namoroka | c | 987.80 | 3999 | 2 |
| john | skype | dbase | 123.00 | 4002 | 0 |
| joseph | bon echo | c | 564.75 | 6000 | 11 |
| Mary | chrome | cobal | 200.00 | 8700 | 19 |
| preethi | avast | basic | 320.25 | 2380 | 7 |
| ramesh | safari | cobal | 345.76 | 7800 | 1 |
| somdutt | parachutes | c | 890.00 | 5000 | 44 |
| xavier | shiretoko | pascal | 900.00 | 3400 | 7 |

**TABLE 3:**

**STUDIES:**

|  |  |  |  |
| --- | --- | --- | --- |
| name | splace | course | ccost |
| chandrika | paragathi | c | 3400 |
| faritha | paragathi | dca | 1200 |
| francis | bdps | pgdca | 4500 |
| gowtham | sabhari | dcs | 5000 |
| john | paragathi | dit | 7600 |
| joseph | paragathi | dcs | 4500 |
| somdutt | sabhari | pgx`dca | 990 |
| vikram | S.S.I.L | dca | 4300 |
| vishal | S.S.I.L | dit | 5100 |
| tom | bdps | pgdca | 7600 |
| xavier | sabhari | dcs | 7200 |

**QUERIES - 1**

1. Find out the SELLING COST AVERAGE for the packages developed in PASCAL?

select AVG(scost) as Selling\_Cost\_Average from software where dev\_in = 'pascal';

Selling\_Cost\_Average

567

2. Display the names and ages of all programmers.

select name , FLOOR(YEAR(GETDATE()) - YEAR(dob)) as age from programmer;

name age

aishwarya 47

ananthi 21

aswini 21

chandrika 38

fathima 41

francis 63

somdutt 54

tom 21

yuvan 57

xavier 54

3. Display the names and ages of all the programmers who have undergone training in DCS course.

select p.name, FLOOR(YEAR(GETDATE()) - YEAR(dob)) as age, st.course from programmer p, studies st where (p.name = st.name) AND course = 'dcs';

name age course

xavier 54 dcs

4. What is the highest numbers of copies sold by a package?

select title from software where sold = (select max(sold) from software);

title (No column name)

avast 7

bon echo 11

chrome 19

namoroka 2

pandora 9

parachutes 44

phoenix 23

safari 1

samdev 5

shiretoko 7

skype 0

slack 0

5. Display the names and date of birth of all the programmer born in JANUARY.

select name, dob from programmer where MONTH(dob) = 01;

name dob

aswini 1998-01-09

francis 1956-01-31

yuvan 1962-01-01

xavier 1965-01-22

6. Display lowest course fee.

select course from studies where ccost = (select min(ccost) from studies);

course

pgdca

7. How many programmer has done PGDCA course.

select count(course)as PGDCA from studies st, programmer p where (p.name = st.name) AND course = 'pgdca';

PGDCA

3

8. How much revenue has been earned through sales of packages in C.

select sum(sold \* (scost+dcost)) from software where dev\_in = 'c';

sales

341336

9. Display the details of software developed by Ramesh?

select \* from software where name = 'ramesh';

name title dev\_in scost dcost sold

ramesh safari cobal 345 7800 1

10. How many programmers studied at SABHARI.

select count(p.name) as programmers from programmer p, studies st where (p.name = st.name) AND splace = 'sabhari';

programmers

2

11. Display the details of PACKAGES whose sales crossed the 20000 mark.

select title from software where(sold \* (scost+dcost)) > 20000;

title

pandora

phoenix

bon echo

chrome

parachutes

shiretoko

12. Find out the number of copies which should be sold in order to recover the development cost of each package.

select title, (dcost/scost) as copies from software where (sold \* scost) < dcost;

title copies

slack 6

samdev 5

namoroka 4

skype 32

chrome 43

avast 7

safari 22

13. What is the price of the costliest software developed in BASIC?

select max(dcost)as cost from software where dev\_in = 'basic';

cost

2380

14. Display the details of packages for which development cost has been recovered.

select title from software where (sold \* scost) > dcost;

title

pandora

phoenix

bon echo

parachutes

shiretoko

15. How many packages were developed in dbase?

select count(title) as packages from software where dev\_in = 'dbase';

packages

2

16. How many programmers studies at paragathi?

select count(splace) as count from programmer p, studies st where (p.name = st.name) AND splace = 'paragathi';

count

1

17. How many programmers paid 5000 to 10000 for their course?

select count(p.name) as count from studies st, programmer p where (p.name = st.name) AND (ccost > =5000 AND ccost<=10000);

count

2

18. What is the average course fee?

select AVG(ccost) as average from studies;

average

4671

19. Display the details of programmers knowing c?

select name from programmer where (prof1 = 'c' OR prof2 = 'c');

name

chandrika

fathima

somdutt

20. How many programmers know either Cobol or Pascal?

select count(name) as count from programmer where ((prof1 = 'cobal' OR prof1 = 'pascal') OR (prof2 = 'pascal' OR prof2 = 'cobal'));

count

7

21. How many programmers don't know Pascal & C?

select count(name) as count from programmer where (prof1 != 'pascal' or prof1 != 'c') AND (prof2 !='pascal' or prof2 != 'c');

count

10

22. How old is the oldest male programmers?

select max(year(getdate()) - year(dob)) as age from programmer where sex = 'm';

age

63

23. What is the average age of female programmers?

select avg(year(getdate()) - year(dob)) as age from programmer where sex = 'f';

age

33

24. Calculate the experience in years for each programmers and display along with the names in descending order?

select name, (year(getdate()) - year(doj)) as exp from programmer order by name desc;

name exp

yuvan 27

xavier 0

tom 2

somdutt 27

francis 30

fathima 21

chandrika 21

aswini 2

ananthi 3

aishwarya 27

25. Who are the programmers who celebrate their birthday during the current month?

select name from programmer where month(getdate()) = month(dob);

name

tom

26. How many female programmers are there?

select count(name) as count from programmer where sex = 'f';

count

5

27. What are the languages known by the male programmers?

select distinct prof1 from programmer where sex = 'm' union (select distinct prof2 from programmer where sex = 'm');

prof1

basic

c

c++

clipper

cobal

java

pascal

28. What is the Average salary?

select avg(salary) as average from programmer;

average

4010

29. How many people draw 2000 to 4000?

select count(name) as count from programmer where salary >=2000 and salary <=4000;

count

5

30. Display the details of those who don't know Clipper, Cobol or Pascal?

select \* from programmer where ((prof1 != 'clipper' and prof1 != 'cobal' and prof1 != 'pascal') AND (prof2 != 'clipper' and prof2 != 'cobal' and prof2 != 'pascal'));

name dob doj sex prof1 prof2 salary

aishwarya 1972-09-11 1992-09-08 f dotnet python 2100

fathima 1978-02-23 1998-12-23 f c basic 6000

31. How many Female programmers knowing C are above 24 years of age?

select count(name) as count from programmer where sex = 'f' AND ((year(getdate()) - year(dob)) > 24) AND (prof1 = 'c' or prof2 = 'c');

count

2

32. Who are the programmers who will be celebrating their Birthday within a week?

select name from programmer where (datepart(week, getdate()) - datepart(week, dob)) <=7;

name

aishwarya

chandrika

somdutt

tom

33. Display the details of those with less than a year's experience?

select \* from programmer where (year(getdate()) - year(doj)) < 1;

name dob doj sex prof1 prof2 salary

xavier 1965-01-22 2019-03-03 m cobal basic 4700

34. Display the details of those who will be completing 2 years of service this year?

select \* from programmer where (year(getdate()) - year(doj)) < 2;

name dob doj sex prof1 prof2 salary

xavier 1965-01-22 2019-03-03 m cobal basic 4700

35. Calculate the amount to be recovered for those packages whose development cost has not been recovered?

select dcost - (scost \* sold) as amount from software where (sold \* scost) < dcost;

amount

3435

275

2025

4002

4900

140

7455

36. List the packages which have not been sold so far?

select \* from software where sold = 0;

name title dev\_in scost dcost sold

ajith slack dbase 567 3435 0

john skype dbase 123 4002 0

37. Find out the cost of the software developed by Mary?

select scost from software where name = 'mary';

scost

200

38. Display the institute’s names from the studies table without duplicates?

select distinct splace from studies;

splace

bdps

paragathi

S.S.I.L

sabhari

39. How many different courses are mentioned in the studies table?

select count(distinct(course)) as count from studies;

count

5

40. Display the names of the programmers whose names contain 2 occurrences of the letter A?

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

name

aishwarya

ananthi

chandrika

fathima

41. Display the names of programmers whose names contain unto 5 characters?

select name from programmer where len(name) <= 5;

name

tom

yuvan

42. How many female programmers knowing COBOL have more than 2 years experience?

select count(name) as count from programmer where (sex = 'f') AND (year(getdate())) - year(doj) >=2 AND (prof1 = 'cobal' OR prof2 = 'cobal');

count

1

43. What is the length of the shortest name in the programmer table?

select min(len(name)) as count from programmer;

count

3

44. What is the average development cost of a package developed in COBOL?

select avg(dcost) as average from software where dev\_in = 'cobal';

average

5182

45. Display the name, sex, dob (DD/MM/YY format), doj for all the programmers without using conversion function?

select name, sex, format(dob, 'dd/MM/yy' ) as dob, doj from programmer

name sex dob doj

aishwarya f 11/09/72 1992-09-08

ananthi f 08/02/98 2016-04-01

aswini f 09/01/98 2017-06-20

chandrika f 29/09/81 1998-12-23

fathima f 23/02/78 1998-12-23

francis m 31/01/56 1989-08-18

somdutt m 09/09/65 1992-04-21

tom m 22/07/98 2017-04-19

yuvan m 01/01/62 1992-01-02

xavier m 22/01/65 2019-03-03

46. Who are the programmers who were born on the last day of the month?

select name from programmer where day(dob) = 31;

name

francis

47. What is the amount paid in salaries of the male programmers who do not know Cobol?

select sum(salary) as salary from programmer where sex = 'm' AND (prof1 != 'cobal' AND prof2 != 'cobal');

salary

11800

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;

title scost dcost diff

chrome 200 8700 8500

safari 345 7800 7455

bon echo 564 6000 5436

phoenix 234 4555 4321

parachutes 890 5000 4110

skype 123 4002 3879

namoroka 987 3999 3012

slack 567 3435 2868

shiretoko 900 3400 2500

avast 320 2380 2060

pandora 456 2230 1774

samdev 345 2000 1655

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);

name dob doj

aishwarya 1972-09-11 1992-09-08

yuvan 1962-01-01 1992-01-02

50. Display the names of the packages whose names contain more than 1 word?

select title from software where title like '% %';

title

bon echo

**QUERIES-2**

1.Display the number of packages developed in each language.

select dev\_in, count(dev\_in) as count from software group by dev\_in;

dev\_in count

basic 1

c 3

cobal 4

dbase 2

pascal 2

2. Display the number of packages developed by each person.

select name, count(dev\_in) as count from software group by name;

name count

aarav 1

ajith 1

anitha 1

francis 1

gowtham 1

john 1

joseph 1

Mary 1

preethi 1

ramesh 1

somdutt 1

xavier 1

3. Display the number of male and female programmer.

select sex, count(sex) as count from programmer group by sex;

sex count

f 5

m 5

4. Display the costliest packages and higest selling developed in each language.

select dev\_in, MAX(scost+dcost) as cosliest\_package, max(sold) as higest\_selling from software group by dev\_in;

dev\_in cosliest\_package higest\_selling

basic 2700 7

c 6564 44

cobal 8900 19

dbase 4125 0

pascal 4789 23

5. Display the number of people born in each year.

select year(dob) as year, count(dob) as count from programmer group by year(dob);

year count

1956 1

1962 1

1965 2

1972 1

1978 1

1981 1

1998 3

6. Display the number of people joined in each year.

select year(doj) as year, count(doj) as count from programmer group by year(doj);

year count

1989 1

1992 3

1998 2

2016 1

2017 2

2019 1

7. Display the number of people born in each month.

select month(dob) as month, count(dob) as count from programmer group by month(dob);

month count

1 4

2 2

7 1

9 3

8. Display the number of people joined in each month.

select month(doj) as month, count(doj) as count from programmer group by month(doj);

month count

1 1

3 1

4 3

6 1

8 1

9 1

12 2

9. Display the language wise counts of prof1.

select prof1, count(prof1) as count from programmer group by prof1;

prof1 count

c 2

clipper 1

cobal 3

dotnet 1

pascal 3

10. Display the language wise counts of prof2.

select prof2, count(prof2) as count from programmer group by prof2;

prof2 count

basic 3

c 1

c++ 1

dbase 2

java 1

pascal 1

python 1

11. Display the number of people in each salary group.

select salary, count(salary) as count from programmer group by salary;

salary count

2100 1

3400 2

3700 1

3800 1

4200 2

4600 1

4700 1

6000 1

12. Display the number of people who studied in each institute.

select splace, count(splace) as count from studies group by splace;

splace count

bdps 2

paragathi 4

S.S.I.L 2

sabhari 3

13. Display the number of people who studied in each course.

select course, count(course) as count from studies group by course;

course count

c 1

dca 2

dcs 3

dit 2

pgdca 3

14. Display the total development cost of the packages developed in each language.

select dev\_in, sum(dcost) as sum from software group by dev\_in;

dev\_in sum

basic 2380

c 14999

cobal 20730

dbase 7437

pascal 7955

15. Display the selling cost of the package developed in each language.

select dev\_in, sum(scost) as sum from software group by dev\_in;

dev\_in sum

basic 320

c 2441

cobal 1346

dbase 690

pascal 1134

16. Display the cost of the package developed by each programmer.

select p.name, sum(scost+dcost) as total from programmer p, software s where (p.name = s.name) group by p.name;

name total

francis 4789

somdutt 5890

xavier 4300

17. Display the sales values of the package developed in each programmer.

select p.name, sum(scost\*sold) as sum from programmer p, software s where (p.name = s.name) group by p.name;

name sum

francis 5382

somdutt 39160

xavier 6300

18. Display the number of packages developed by each programmer.

select p.name, count(dev\_in) as count from programmer p, software s where (p.name = s.name) group by p.name;,

name count

francis 1

somdutt 1

xavier 1

19. Display the sales cost of packages developed by each programmer language wise.

select name, dev\_in, sum(scost) as sum from software group by name, dev\_in;

name dev\_in sum

preethi basic 320

gowtham c 987

joseph c 564

somdutt c 890

aarav cobal 456

anitha cobal 345

Mary cobal 200

ramesh cobal 345

ajith dbase 567

john dbase 123

francis pascal 234

xavier pascal 900

20. Display each programmers name, costliest package and cheapest packages developed by him/her.

select name, dev\_in, max(dcost) as MAX, min(dcost) as MIN from software group by name, dev\_in;

name dev\_in MAX MIN

preethi basic 2380 2380

gowtham c 3999 3999

joseph c 6000 6000

somdutt c 5000 5000

aarav cobal 2230 2230

anitha cobal 2000 2000

Mary cobal 8700 8700

ramesh cobal 7800 7800

ajith dbase 3435 3435

john dbase 4002 4002

francis pascal 4555 4555

xavier pascal 3400 3400

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+dcost), avg(scost) from software group by dev\_in;

dev\_in (No column name) (No column name) (No column name)

basic 2380 2700 320

c 4999 5813 813

cobal 5182 5519 336

dbase 3718 4063 345

pascal 3977 4544 567

python 5000 5357 357

22. display each institute name with number of courses, average cost per course.

select splace, count(course) as count, avg(ccost) as avg from studies group by splace;

splace count avg

bdps 2 6050

paragathi 4 4175

S.S.I.L 2 4700

sabhari 3 4396

23. Display each institute name with number of students.

select splace, count(name) as count from studies group by splace;

splace count

bdps 2

paragathi 4

S.S.I.L 2

sabhari 3

24. Display names of male and female programmers.

select name, sex from programmer group by name, sex;

name sex

aishwarya f

ananthi f

aswini f

chandrika f

fathima f

francis m

somdutt m

tom m

xavier m

yuvan m

25. Display the programmer's name and their packages.

select p.name, s.title from programmer p, software s where (p.name = s.name);

name title

francis phoenix

somdutt parachutes

xavier shiretoko

26. Display the number of packages in each language.

select dev\_in, count(dev\_in) as count from software group by dev\_in;

dev\_in count

basic 1

c 3

cobal 4

dbase 2

pascal 2

27. Display the number of packages in each language for which development cost is less than 1000.

select dev\_in, count(title) as count from software where dcost<1000 group by dev\_in;

0

28. Display the average difference between scost and dcost for each language.

select dev\_in, avg(dcost - scost) as avg from software group by dev\_in;

dev\_in avg

basic 2060

c 4186

cobal 4846

dbase 3373

pascal 3410

29. Display the total scost, dcsot and amount to be recovered for each programmer for whose dcost has not yet been recovered.

select p.name, Max(s.scost) as scost, max(dcost)as dcost , sum((s.scost\*s.sold)-software.dcost)as recovery from programmer p,software s where p.name=s.name group by p.name;

name scost dcost recovery

francis 234 4555 827

somdutt 890 5000 34160

xavier 900 3400 2900

30. Display highest, lowest and average salaries for those earning more than 2000.

select name, max(salary) as max, min(salary) as min, avg(salary) as avg from programmer where salary > 2000 group by name;

name max min avg

aishwarya 2100 2100 2100

ananthi 4200 4200 4200

aswini 3400 3400 3400

chandrika 3700 3700 3700

fathima 6000 6000 6000

francis 4200 4200 4200

somdutt 4600 4600 4600

tom 3800 3800 3800

xavier 4700 4700 4700

yuvan 3400 3400 3400

**QUERIES-3**

1) Who is the highest paid C programmer?

select name, salary from programmer where salary = (select max(salary) from programmer where prof1 = 'c' or prof2 = 'c');

name salary

fathima 6000

2) Who is the highest paid female cobol programmer?

select name, salary from programmer where sex = 'f' and salary =(select max(salary) from programmer where (prof1 ='cobal' or prof2 = 'cobal')and sex = 'f');

name salary

ananthi 4200

3) Display the name of the HIGEST paid programmer for EACH language (prof1)

select distinct prof1, name, salary from programmer where salary in (select max(salary) from programmer group by prof1);

4) Who is the LEAST experienced programmer?

select name, (year(getdate()) - year(doj)) as diff from programmer where (year(getdate()) - year(doj)) = (select min((year(getdate()) - year(doj))) from programmer);

name diff

xavier 0

5) Who is the most experienced programmer?

select name, (year(getdate()) - year(doj)) as diff from programmer where (year(getdate()) - year(doj)) = (select max((year(getdate()) - year(doj))) from programmer);

name diff

francis 30

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;

prof1

c++

clipper

dotnet

java

python

7) Who is the yongest programmer knowing dbase?

select name, (year(getdate()) - year(dob)) as age from programmer where prof1 = 'dbase' or prof2 = 'dbase' and (year(getdate()) - year(dob)) = (select min((year(getdate()) - year(dob))) from programmer) ;

name age

ananthi 21

aswini 21

8) Which institute has most number of students?

select top 1 splace, count(splace) as count1 from studies group by splace order by count1 desc;

splace count

paragathi 4

9) Which female programmer earns more than 3000/- but does not know c, c++, oracle or dbase?

select name from programmer where sex = 'f' and (prof1 != 'c' and prof1 != 'c++' and prof1 != 'oracle' and prof1 != 'dbase') and (prof2 != 'c' and prof2 != 'c++' and prof2 != 'oracle' and prof2 != 'dbase') and (salary > 3000);

count

0

10) Which is the costliest course?

select course, ccost from studies where ccost = (select max(ccost) from studies);

course ccost

dit 7600

pgdca 7600

11) Which course has been done by most of the students?

select top 2 course, count(name) as count1 from studies group by course order by count1 desc;

course count1

dcs 3

pgdca 3

12) Display name of the institute and course which has below average course fee?

select splace, course, ccost from studies where ccost < (select avg(ccost) from studies);

splace course ccost

paragathi c 3400

paragathi dca 1200

bdps pgdca 4500

paragathi dcs 4500

sabhari pgdca 990

S.S.I.L dca 4300

13) Which institute conducts costliest course?

select splace, ccost from studies where ccost = (select max(ccost) from studies);

splace ccost

paragathi 7600

bdps 7600

14) Which course has below average number of students?

select course from studies group by course having count(course)<=(select count(course)/count( distinct course) from studies);

course

c

dca

dit

15) Which institute conducts the above course?

select distinct splace from studies where course in (select course from studies group by course having count(course)<=(select count(course)/count(distinct course) from studies));

splace

paragathi

S.S.I.L

16) Display names of the course whose fees are within 1000(+ or -) of the average fee.

select course, ccost from studies where (ccost < (select avg(ccost)+1000 from studies) AND ccost > (select avg(ccost)-1000 from studies));

course ccost

pgdca 4500

dcs 5000

dcs 4500

dca 4300

dit 5100

17) Which package has the highest development cost?

select title, dcost from software where dcost = (select max(dcost) from software);

title dcost

chrome 8700

18) Which package has the lowest selling cost?

select title, scost from software where scost = (select min(scost) from software);

title scost

skype 123

19) Who developed the package, which has sold the least number of copies?

select name, sold from software where sold = (select min(sold) from software);

name sold

ajith 0

john 0

20) Which language was used to develop the package which has the higest sales amount?

select dev\_in, scost from software where scost = (select max(scost) from software);

dev\_in scost

c 987

21) How many copies of the package that has the least diffrence between development and selling cost were sold?

select title, sold, (dcost-scost) from software where (dcost-scost) = (select min(dcost - scost) as diff from software);

title sold diff

samdev 5 1655

22) Which is the costliest package developed in pascal?

select title, dcost from software where dcost = (select max(dcost) from software where dev\_in = 'pascal');

title dcost

phoenix 4555

23) Which language was used to develop the most number of package?

select top 1 dev\_in, count(dev\_in) as count from software group by dev\_in order by count(dev\_in) desc;

dev\_in count

cobal 4

24) Which programmer has developed the highest number of package?

select top 3 p.name, count(title) as count from programmer p, software s where (p.name = s.name) group by p.name order by count(title);

name count

francis 1

somdutt 1

xavier 1

25) Who is the author of the costliest package?

select name, (scost+dcost) as cost from software where (scost+dcost) = (select max(scost+dcost) from software);

name cost

Mary 8900

26) Display names of packages which have been sold less than the average number of copies?

select title, sold from software where sold < (select avg(sold) from software);

title sold

pandora 9

slack 0

samdev 5

namoroka 2

skype 0

avast 7

safari 1

shiretoko 7

27) Who are the female programmers earning more than the highest paid male programmers?

select name, salary from programmer where sex = 'f' and salary > (select max(salary) from programmer where sex = 'm');

name salary

fathima 6000

28) Which language has been stated as prof1 by most of the programmers?

select top 1 prof1, count(prof1) as count from programmer group by prof1 order by count(prof1) desc;

prof1 count

cobal 3

29) Who are the authors of packages, which have recovered more than double the development cost?

select name from software where (sold \* scost) \* 2 > dcost;

name

aarav

anitha

francis

joseph

preethi

somdutt

xavier

30) Display programmer names and cheapest package developed by them in each language?

select name, dev\_in, min(dcost) as min from software group by name, dev\_in;

name dev\_in min

preethi basic 2380

gowtham c 3999

joseph c 6000

somdutt c 5000

aarav cobal 2230

anitha cobal 2000

Mary cobal 8700

ramesh cobal 7800

ajith dbase 3435

john dbase 4002

francis pascal 4555

xavier pascal 3400

31) Who is the youngest male programmer born in 1965?

select name from programmer where sex = 'm' and year(dob) = 1965 and month(dob) = (select min(month(dob)) from programmer where year(dob) = 1965 );

name

xavier

32) Display language used by each programmer to develop the highest selling and lowest selling package.

select name, dev\_in, max(scost) as max, min(scost) as min from software group by name, dev\_in;

name dev\_in max min

preethi basic 320 320

gowtham c 987 987

joseph c 564 564

somdutt c 890 890

aarav cobal 456 456

anitha cobal 345 345

Mary cobal 200 200

ramesh cobal 345 345

ajith dbase 567 567

john dbase 123 123

francis pascal 234 234

xavier pascal 900 900

33) Who is the oldest female programmer who joined in 1992?

select name from programmer where sex = 'f' and year(doj) = 1992 and year(dob) = (select max(year(dob)) from programmer where year(doj) = 1992 );

name

aishwarya

34) In which year where the most number of programmer born?

select top 1 year(dob) as year, count(year(dob)) as count from programmer group by year(dob) order by (count(year(dob))) desc;

year count

1998 3

35) In which month did most number of programmer join?

select top 1 month(doj) as month, count(month(doj)) as count from programmer group by month(doj) order by (count(month(doj))) desc;

month count

4 3

36) In which language are most of the programmer's proficient

select top 1 prof1, count(prof1) from programmer group by prof1 having prof1 not in (select prof2 from programmer) order by count(prof1) desc

select top 1 prof2, count(prof2) from programmer group by prof2 having prof2 not in (select prof1 from programmer) order by count(prof2) desc;

select prof1 from programmer group by prof1 having count(prof1)=(select top 1 count(prof1) as count from programmer group by prof1 order by count desc) or count (prof2)=(select top 1 count(prof2) as count1 from programmer group by prof2) union

select prof2 from programmer group by prof2 having count(prof1)=(select top 1 count(prof1)as count from programmer group by prof1 order by count desc) or count(prof2)=(select top 1 count (prof2) as count1 from programmer group by prof2 order by count1 desc)

prof1

basic

cobal

pascal

37) Who are the male programmers earning below the average salary of female programmers?

select name, salary from programmer where sex = 'm' and salary < (select avg(salary) from programmer where sex = 'f');

name salary

tom 3800

yuvan 3400

38)Who are the male programmers earning below the average salary of female programmers?

select name, salary from programmer where sex = 'm' and salary < (select avg(salary) from programmer where sex = 'f');

name salary

tom 3800

yuvan 3400

**QUERIES-4**

1) Display the details of those who are drawing the same salary.

select p.\* from programmer p, programmer p1 where (p.salary = p1.salary) and (p.name != p1.name) order by salary ;

name salary

yuvan 3400

aswini 3400

francis 4200

ananthi 4200

2) Display the details of software developed by male programmers earning more than 3000.

select p.\* from programmer p, software s where (p.name = s.name) AND sex = 'm' AND salary > 3000;

name dob doj sex prof1 prof2 salary

francis 1956-01-31 1989-08-18 m cobal java 4200

somdutt 1965-09-09 1992-04-21 m pascal c 4600

xavier 1965-01-22 2019-03-03 m cobal basic 4700

3) Display details of packages developed in pascal by female programmers.

select p.\* from programmer p, software s where (p.name = s.name) AND sex = 'f' AND dev\_in = 'pascal';

count

0

4) Display the details of these programmer who joined before 1990.

select \* from programmer where year(doj) < 1990;

name dob doj sex prof1 prof2 salary

francis 1956-01-31 1989-08-18 m cobal java 4200

5)Display details of software developed in C by female programmers of paragathi.

select s.\* from programmer p, software s, studies st where (p.name = s.name) and (p.name = st.name) and sex = 'f' and dev\_in = 'c' and splace = 'paragathi';

count

0

6) Display number of packages number of copies sold and sales value of each  programmer Institute-wise.

select st.name, st.splace, count(title)as countOfPackages, sum(sold) as sold, sum(scost) as sales from programmer p, software s, studies st where (p.name = s.name) and (p.name = st.name) group by st.name, splace;

name splace countOfPackages sold sales

francis bdps 1 23 234

somdutt sabhari 1 44 890

xavier sabhari 1 7 900

7) Display details of software developed in dbase by male programmers who belong to the institute on which most number of programmers studies.

select s.\* from programmer p, software s, studies st where (p.name = s.name) and (p.name = st.name) and dev\_in = 'dbase' and sex = 'm' and splace in (select max(splace) from studies group by splace);

count

0

8) Display the details of the software that was developed by male programmers born before 1965 and female programmers born after 1975.

select s.\* from programmer p, software s where (p.name = s.name) and ((sex = 'm' and year(dob) < 1965) or (sex = 'f' and year(dob) > 1975));

name title dev\_in scost dcost sold

francis phoenix pascal 234 4555 23

9) Display the details of the software that was developed in the language that is not the programmers first proficiency.

select s.\* from software s, programmer p where (s.name = p.name) and s.dev\_in != p.prof1;

name title dev\_in scost dcost sold

francis phoenix pascal 234 4555 23

somdutt parachutes c 890 5000 44

xavier shiretoko pascal 900 3400 7

10) Display details of software that was developed in the language which is neither first nor second proficiency of the programmer.

select s.\* from software s, programmer p where (s.name = p.name) and s.dev\_in != p.prof1 and s.dev\_in != p.prof2;

name title dev\_in scost dcost sold

francis phoenix pascal 234 4555 23

xavier shiretoko pascal 900 3400 7

11) Display details of software developed by male students of sabhari.

select s.\* from studies st, software s, programmer p where(p.name = s.name) and (s.name = st.name) and sex = 'm' and splace = 'sabhari';

name title dev\_in scost dcost sold

somdutt parachutes c 890 5000 44

xavier shiretoko pascal 900 3400 7

12) Display the names of programmers WHO HAVE NOT developed any package.

select distinct p.name from programmer p, software s where p.name not in (select name from software);

name

aishwarya

ananthi

aswini

chandrika

fathima

tom

yuvan

13) What is the total cost of the software developed by the programmers by apple?

select sum(scost) as sum from programmer p, software s, studies st where (p.name = s.name) and (p.name = st.name) and splace = 'apple';

sum

0

14) Who are the programmers who joined in the same day?

select p.name from programmer p, programmer p1 where (p.name != p1.name) and (p.doj = p1.doj);

name

fathima

chandrika

15) Who are the programmers who have the same prof2?

select distinct p.name, p.prof2 from programmer p, programmer p1 where (p.name != p1.name) and (p.prof2 = p1.prof2);

name prof2

fathima basic

tom basic

xavier basic

ananthi dbase

aswini dbase

16) Display the total sales values of software, institutes-wise.

select splace, sum(scost) as sum from software s, studies st where (s.name = st.name) group by splace;

splace sum

bdps 234

paragathi 687

sabhari 2777

17) In which institutes did the person who developed the costliest package study?

select st.splace, s.name, dcost from software s, studies st where s.name = st.name and dcost = (select max(dcost) from software s, studies st where s.name = st.name);

splace name dcost

paragathi joseph 6000

18) Which language listed in prof1 and prof2 has not been used to develop any package?

select prof1 from programmer where prof1 not in (select dev\_in from software) union select prof2 from programmer where prof2 not in (select dev\_in from software);

prof1

c++

clipper

dotnet

java

python

19) How much does the person who developed the highest selling package earn and what course did he/she undergo?

select s.name, salary, splace, scost from software s,programmer p, studies st where p.name=st.name and s.name=p.name and st.name=s.name and scost in (select max(scost) from programmer p,software s where p.name=s.name );

name salary splace scost

xavier 4700 sabhari 900

20) How many months will it take for each programmer to recover the cost of the course underwent?

select p.name, ceiling(ccost/salary) as month from programmer p, studies st where (p.name = st.name);

name month

chandrika 0

francis 1

somdutt 0

tom 2

xavier 1

21) Which is the costliest package developed by a person with under 3 years expenence?

select s.\* from software s, programmer p where s.name=p.name and (year(getdate())-year(doj))<3 and dcost = (select max (dcost) from programmer p,software s where p.name=s.name and (year(getdate())-year(doj))<3);

name title dev\_in scost dcost sold

xavier shiretoko pascal 900 3400 7

22) What is the average salary for those whose software's sales value is more than 50,000?

select avg(salary) as avg from programmer p, software s where (p.name = s.name) and ((s.scost + s.dcost) \* s.sold) > 50000;

avg

4400

23) How many packages were developed by the students who studied in the institute that charge the lowest course fee?

select count(s.title) as count from software s, studies st where (s.name = st.name) group by s.name, ccost having ccost = (select min(ccost) from studies);

count

1

24) How many packages were developed by the person who developed the cheapest package. Where did he\she study?

select s.name, count(title)as count , st.splace from software s,studies st where (st.name = s.name) and dcost = (select min(dcost) from software s, studies st where st.name=s.name) group by s.name,st.splace ;

name count splace

xavier 1 sabhari

25) How many packages were developed by female programmers earning more than the highest paid male programmer?

select count(p.name) as count from programmer p, software s where (p.name = s.name) and sex = 'f' and p.salary > (select max(salary) from programmer where sex = 'm');

count

0

26) How many packages were developed by the most experienced programmers from bdps.

select count(title) as count from software s, studies st, programmer p where (s.name = st.name) and (p.name = s.name) and (p.name = st.name) and year(getdate()) - year(doj) = (select max(year(getdate()) - year(doj)) from programmer p,studies st where st.name = p.name and st.splace = 'bdps');

count

1

27) List the programmers (from software table) and institutes they studied, including those who didn't develop any package.

select name,splace from studies where name not in(select name from software);

name splace

chandrika paragathi

faritha paragathi

vikram S.S.I.L

vishal S.S.I.L

tom bdps

28) List each profit with the number of programmers having that prof1 and the number of packages developed in that prof1.

select dev\_in, count(\*) as count ,sum((scost\*sold)-(dcost)) as profit from software where dev\_in in (select prof1 from programmer) and (scost\*sold)>dcost group by dev\_in;

dev\_in count profit

c 2 34364

cobal 1 1874

pascal 2 3727

29) List programmer names (from programmer table) and number of packages each developed.

select p.name, count(dev\_in) as count from programmer p, software s where (p.name = s.name) group by p.name;

name count

francis 1

somdutt 1

xavier 1

30) List all the details of programmers who has done a course at S.S.I.L.

select p.\* from programmer p, studies s where (p.name = s.name) and splace = 'S.S.I.L';

Answer : 0