SQL ASSIGNMENT

PROGRAMMER

	name	dob	doj	sex	prof1	prof2	salary
1	ANAND	1966-04-12	2010-04-21	M	PASCAL	BASIC	3200
2	ALTAF	1964-07-02	1990-11-13	М	CLIPPER	COBOL	2800
3	JULIANA	1960-01-30	1990-04-21	F	COBOL	DBASE	3000
4	KAMALA	1998-09-30	2012-01-02	F	С	DBASE	2900
5	MARY	1970-06-28	1991-02-01	F	CPP	ORACLE	4500
6	NELSON	1985-09-11	2005-03-11	М	COBOL	DBASE	2500
7	PATTRICK	1965-11-10	1990-04-21	М	PASCAL	NULL	2800
8	QADIR	1990-10-31	2020-04-21	М	ASSEMBLY	С	3000
9	RAMESH	1967-05-03	1991-02-26	М	PASCAL	DBASE	3200
10	REBECCA	1967-01-01	1990-12-01	F	BASIC	COBOL	2500

SOFTWARE

	name	title	dev_in	scost	dcost	sold
1	MARY	README	CPP	100.00	1200	84
2	ANAND	PARACHUTES	BASIC	399.95	6000	43
3	ANAND	VIDEOTITLING	PASCAL	7500.00	16000	9
4	JULIANA	INVENTORY	COBOL	3000.00	3500	0
5	KAMALA	PAYROLLPRG	DBASE	9000.00	20000	7
6	MARY	FINANCIALACC	ORACLE	18000.00	85000	4
7	MARY	CODEGENRRATOP	C	4500.00	20000	23
8	PATTRICK	README	CPP	300.00	1200	84
9	QADIR	BOMBSAWAY	ASSEMBLY	750.00	5000	11
10	QADIR	VACCINES	С	1900.00	3400	21
11	RAMESH	HOTLIMGMT	DBASE	12000.00	35000	4
12	RAMESH	DEADLEE	PASCAL	599.95	4500	73
13	REMITHA	PCUTILITIES	С	725.00	5000	51
14	REMITHA	TSRHELPPKG	ASSEMBLY	2500.00	6000	7
15	REVATHI	HOSPITALMGMT	PASCAL	1100.00	75000	2
16	VIJAYA	TSREDITOR	С	900.00	700	6

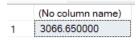
STUDIES

	name	splace	course	ccost
1	ANAND	SABHARI	PGDCA	4500
2	ALTAF	COIT	DCA	7200
3	JULIANA	BITS	MCA	22000
4	KAMALA	PRAGATHI	DCP	5000
5	MARY	SABHARI	PGDCA	4500
6	NELSON	PRAGATHI	DAP	6200
7	PATRICK	PRAGATHI	DCAP	5200
8	QADIR	APPLE	HDCP	14000
9	RAMESH	SABHARI	PGDCA	4500
10	RESECCA	BRILLIANT	DCAP	11000
11	REMITHA	BDPS	DCS	6000
12	VIJAYA	BDPS	DCA	48000

QUERIES-1

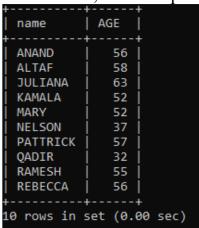
1) Find out the SELLING COST AVERAGE for the packages developed in PASCAL?

SELECT AVG(scost) FROM Software WHERE dev_in LIKE 'PASCAL'



2)Display the names and ages of all programmers

Select name, timestampdiff(year, dob, curdate()) from programmer;



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

select programmer.name,timestampdiff(YEAR,DOB,CURDATE()) as age from programmer inner join studies where programmer.name=studies.name and course='DCS';

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

```
select max(sold) from Software;
```

	(No column name)
1	84

5) Display the names and date of birth of all the programmer born in JANUARY. select name, dob from programmer where month(dob)=1;

	name	dob
1	JULIANA	1960-01-30
2	REBECCA	1967-01-01

6) Display lowest course fee

select min(ccost) from Studies; select min(ccost) from Studies;

	(No column name)		(No column name)
1	11000	1	11000

7) How many programmer has done PGDCA course.

select count(course) from Studies where course='PGDCA';



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

select sum(scost*sold) from Software where dev_in='C';

	(No column name)		(No column name)
1	185775.00	1	185775.00

9) Display the details of software developed by Ramesh? select title,dev in from Software where name='RAMESH';



10) How many programmers studied at SABHARI.

```
select count(splace) from studies where splace='SABHARI';
```

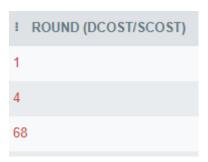
11) Display the details of PACKAGES whose sales crossed the 20000 mark.

select * from Software where (sold*scost)>20000;

	name	title	dev_in	scost	dcost	sold
1	ANAND	VIDEOTITLING	PASCAL	7500.00	16000	9
2	KAMALA	PAYROLLPRG	DBASE	9000.00	20000	7
3	MARY	FINANCIALACC	ORACLE	18000.00	85000	4
4	MARY	CODEGENRRATOP	С	4500.00	20000	23
5	PATTRICK	README	CPP	300.00	1200	84
6	QADIR	VACCINES	С	1900.00	3400	21
7	RAMESH	HOTLIMGMT	DBASE	12000.00	35000	4
8	RAMESH	DEADLEE	PASCAL	599.95	4500	73
9	REMITHA	PCUTILITIES	С	725.00	5000	51

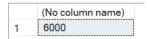
12) Find out the number of copies which should be sold in order to recover the development cost of each package.

SELECT ROUND (DCOST/SCOST) FROM SOFTWARE WHERE
(SCOST*SOLD)<DCOST;</pre>



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

```
select max(dcost) from software where dev_in='BASIC';
```



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

select * from Software where (sold*scost)>dcost;

	name	title	dev_in	scost	dcost	sold
1	MARY	README	CPP	100.00	1200	84
2	ANAND	PARACHUTES	BASIC	399.95	6000	43
3	ANAND	VIDEOTITLING	PASCAL	7500.00	16000	9
4	KAMALA	PAYROLLPRG	DBASE	9000.00	20000	7
5	MARY	CODEGENRRATOP	C	4500.00	20000	23
6	PATTRICK	README	CPP	300.00	1200	84
7	QADIR	BOMBSAWAY	ASSEMBLY	750.00	5000	11
8	QADIR	VACCINES	C	1900.00	3400	21
9	RAMESH	HOTLIMGMT	DBASE	12000.00	35000	4
10	RAMESH	DEADLEE	PASCAL	599.95	4500	73
11	REMITHA	PCUTILITIES	С	725.00	5000	51
12	REMITHA	TSRHELPPKG	ASSEMBLY	2500.00	6000	7
13	VIJAYA	TSREDITOR	С	900.00	700	6

15) How many packages were developed in dbase?

```
select count(dev_in) from Software where dev_in='DBASE';
```



16) How many programmers studies at paragathi?

select count(splace) from Studies where splace='PRAGATHI';



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

select count(name) from Studies where ccost between 5000 and 10000;



18) What is the average course fee?

Select avg(ccost) from Studies;

```
11508.3333333333334
```

19) Display the details of programmers knowing c?

```
select * from programmer where prof1 = 'C' or prof2='C';
```

	name	dob	doj	sex	prof1	prof2	salary
1		1998-09-30	2012-01-02	F	С	DBASE	2900
2	QADIR	1990-10-31	2020-04-21	М	ASSEMBLY	С	3000

20) How many programmers know either Cobol or Pascal?

select count(name) from programmer where (prof1='COBOL' or prof1='PASCAL') or (prof2='COBOL' or prof2='PASCAL');

```
(No column name)
```

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

```
SELECT COUNT (NAME) AS PROGRAMMERS FROM PROGRAMMER WHERE PROF1 NOT IN ('C', 'PASCAL')

AND PROF2 NOT IN ('C', 'PASCAL');

PROGRAMMERS

1 5
```

22) How old is the oldest male programmers?

```
SELECT MAX (FLOOR((SYSDATE - DOB)/365)) FROM PROGRAMMER WHERE SEX = 'M';
```

23) What is the average age of female programmers?

```
SELECT AVG (FLOOR((SYSDATE - DOB)/365)) FROM programmer WHERE
SEX = 'F';
```

```
+-----+
| avg_age |
+-----+
| 44.5000 |
+-----+
1 row in set (0.00 sec)
```

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

```
SELECT NAME, FLOOR ((SYSDATE - DOJ)/365) AS EXPERIENCE FROM
    programmer ORDER BY NAME DESC;
```

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

```
SELECT NAME FROM programmer WHERE TO_CHAR
(DOB,'MM')=TO_CHAR(SYSDATE,'MM');
```

26) How many female programmers are there?

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

	(No column name)
1	4

27) What are the languages known by the male programmers? select prof1, prof2 as languages from programmer where sex='m';

	prof1	languages
1	PASCAL	BASIC
2	CLIPPER	COBOL
3	COBOL	DBASE
4	PASCAL	NULL
5	ASSEMBLY	С
6	PASCAL	DBASE

28) What is the Average salary?

select avg(salary) from programmer;



- 29) How many people draw 2000 to 4000?
- 30) Display the details of those who don't know Clipper, Cobol or Pascal?

select * from programmer where prof1 not in ('clipper','cobol','pascal') and prof2 not in ('clipper','cobol','pascal');

	name	dob	doj	sex	prof1	prof2	salary
1	KAMALA	1998-09-30	2012-01-02	F	C	DBASE	2900
2	MARY	1970-06-28	1991-02-01	F	CPP	ORACLE	4500
3	QADIR	1990-10-31	2020-04-21	М	ASSEMBLY	С	3000

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

```
select name, timestampdiff(year,dob,curdate()) as experience
from programmer where prof1='c' or prof2='c';
```

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

```
SELECT name
FROM programmer WHERE TO_CHAR(DOB,'WW') =
TO CHAR(SYSDATE,'WW');
```

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

select name from programmer where

timestampdiff(year,doj,curdate()) < 1;</pre>

34 Display the details of those who will be completing 2 years of service this year? select name, timestampdiff(year,doj,curdate()) as eperience fromprogrammer where timestampdiff(year,doj,curdate())=2;

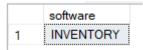
```
+-----+
| name | eperience |
+-----+
| Rahul | 2 |
+-----+
1 row in set (0.00 sec)
```

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

select (dcost-(scost*sold)), title from software where(scost*sold)<dcost;

	(No column name)	title
1	3500.00	INVENTORY
2	13000.00	FINANCIALACC
3	72800.00	HOSPITALMGMT

36) List the packages which have not been sold so far? select title software from software where sold=0;



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

select title, scost as softcost from software where name='mary';

	title	softcost
1	README	100.00
2	FINANCIALACC	18000.00
3	CODEGENRRATOP	4500.00

38) Display the institute's names from the studies table without duplicates?

select distinct splace from studies;

	splace
1	APPLE
2	BDPS
3	BITS
4	BRILLIANT
5	COIT
6	PRAGATHI
7	SABHARI

39) How many different courses are mentioned in the studies table? select distinct course from studies;

1	course DAP
2	DCA
3	DCAP
4	DCP
5	DCS
6	HDCP
7	MCA
8	PGDCA

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
1	ANAND
2	ALTAF
3	JULIANA
4	KAMALA

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 NAME FROM PROGRAMMER WHERE FLOOR((SYSDATE-DOJ)/365)>2 AND SEX='F' AND (PROF1='COBOL' OR PROF2='COBOL');

```
t-----+
| count(name) |
+-------+
| 3 |
+-----+
1 row in set (0.13 sec)
```

- 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';

```
(No column name)
1 3500
```

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

```
select name, sex , substr(dob,1,2) substr(dob,4,3)
substr(dob,8,2) dob, substr(doj,1,2) substr(doj,4,3)
substr(doj,8,2) doj from programmer;
```

- 46) Who are the programmers who were born on the last day of the month? **SELECT name FROM programmer WHERE LAST_DAY(dob) = dob**;
- 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 diff from software order by 4 desc;

	title	scost	dcost	diff
1	HOSPITALMGMT	1100.00	75000	73900.00
2	FINANCIALACC	18000.00	85000	67000.00
3	HOTLIMGMT	12000.00	35000	23000.00
4	CODEGENRRATOP	4500.00	20000	15500.00
5	PAYROLLPRG	9000.00	20000	11000.00
6	VIDEOTITLING	7500.00	16000	8500.00
7	PARACHUTES	399.95	6000	5600.05
8	PCUTILITIES	725.00	5000	4275.00
9	BOMBSAWAY	750.00	5000	4250.00
10	DEADLEE	599.95	4500	3900.05
11	TSRHELPPKG	2500.00	6000	3500.00
12	VACCINES	1900.00	3400	1500.00
13	README	100.00	1200	1100.00
14	README	300.00	1200	900.00
15	INVENTORY	3000.00	3500	500.00
16	TSREDITOR	900.00	700	-200.00

49) Display the name, dob, doj of those month of birth and month of joining are same?

```
SELECT name FROM programmer WHERE
TO_CHAR(DOB, 'MM')=TO_CHAR(DOJ, 'MM');
```

50) Display the names of the packages whose names contain more than 1 word? select title from software where title like '% %';

QUERIES-2

1) Display THE NUMBER OF packages developed in EACH language.

SELECT DEV_IN AS LANGUAGE, COUNT(TITLE) AS NOOFPACK
FROM SOFTWARE GROUP BY DEV_IN

	LANGUAGE	NOOFPACK
1	ASSEMBLY	2
2	BASIC	1
3	С	4
4	COBOL	1
5	CPP	2
6	DBASE	2
7	ORACLE	1
8	PASCAL	3

2) Display THE NUMBER OF packages developed by EACH person.

SELECT NAME AS PRNAME, COUNT(TITLE) AS NOOFPACK FROM SOFTWARE

GROUP BY NAME

	PRNAME	NOOFPACK
1	ANAND	2
2	JULIANA	1
3	KAMALA	1
4	MARY	3
5	PATTRICK	1
6	QADIR	2
7	RAMESH	2
8	REMITHA	2
9	REVATHI	1
10	VIJAYA	1

3) Display THE NUMBER OF male and female programmer. SELECT SEX,COUNT(NAME) AS NAME FROM PROGRAMMER GROUP BY SEX

	SEX	NAME
1	F	4
2	М	6

4) Display THE COSTLIEST packages and HIGEST selling developed in EACH language.

```
SELECT DEV_IN AS LANGAUGE, MAX(SCOST) AS COSTPACK, MAX(SOLD) AS HIGHPACK SFROM SOFTWARE GROUP BY DEV IN
```

5) Display THE NUMBER OF people BORN in EACH YEAR.

SELECT TO_CHAR(DOB, 'YY') AS YEAR, COUNT(NAME) AS PRNO
FROM PROGRAMMER

GROUP BY TO_CHAR(DOB, 'YY')

- 6) Display THE NUMBER OF people JOINED in EACH YEAR.

 SELECT TO_CHAR(DOB, 'YY') AS YEAR, COUNT(NAME) AS PRNO
 FROM PROGRAMMER

 GROUP BY TO_CHAR(DOB, 'YY')
- 7) Display THE NUMBER OF people BORN in EACH MONTH.

 SELECT SUBSTR(DOB,4,3) AS MONTHOFBIRTH,COUNT(NAME) AS PRNO FROM PROGRAMMER GROUP BY SUBSTR(DOB,4,3)

I SUBSTR(DOB,4,3)	COUNT(NAME)
APR	1
AUG	1
JAN	2
JUL	1
JUN	1
MAY	1
NOV	1
OCT	1
SEP	1

8) Display THE NUMBER OF people JOINED in EACH MONTH.

SELECT SUBSTR(DOJ,4,3) AS MONTHOFJOIN,COUNT(NAME)AS PRNO
FROM PROGRAMMER
GROUP BY SUBSTR(DOJ,4,3)

I SUBSTR(DOJ,4,3)	COUNT(NAME)	
APR	4	
DEC	1	
FEB	2	
JAN	1	
MAR	1	
NOV	4	

9) Display the language wise COUNTS of prof1.

SELECT PROF1 AS LANGUAGE, COUNT(PROF1) AS PROF1COUNT

FROM PROGRAMMER GROUP BY PROF1

	LANGUAGE	PROF1COUNT
1	ASSEMBLY	1
2	BASIC	1
3	С	1
4	CLIPPER	1
5	COBOL	2
6	CPP	1
7	PASCAL	3

10) Display the language wise COUNTS of prof2.

SELECT PROF2 AS LANGUAGE, COUNT(PROF2) AS

PROF2COUNT

FROM PROGRAMMER

GROUP BY PROF2

	LANGUAGE	PROF2COUNT
1	NULL	0
2	BASIC	1
3	С	1
4	COBOL	2
5	DBASE	4
6	ORACLE	1

11) Display THE NUMBER OF people in EACH salary group. SELECT SALARY, COUNT(NAME) AS PEOPLE FROM PROGRAMMER GROUP BY SALARY

	SALARY	PEOPLE	
1	2500	2	
2	2800	2	
3	2900	1	
4	3000	2	
5	3200	2	
6	4500	1	

12) Display THE NUMBER OF people who studied in EACH institute. SELECT SPLACE AS INSTITUTE, COUNT(NAME) AS PEOPLE FROM STUDIES

GROUP BY SPLACE

	INSTITUTE	PEOPLE
1	APPLE	1
2	BDPS	2
3	BITS	1
4	BRILLIANT 1	
5	COIT	1
6	PRAGATHI	3
7	SABHARI	3

13) Display THE NUMBER OF people who studied in EACH course. SELECT COURSE AS STUDY, COUNT(NAME) AS PEOPLE FROM STUDIES GROUP BY COURSE

STUDY	PEOPLE	
DAP	1	
DCA	2	
DCAP	2	
DCP	1	
DCS	1	
HDCP	1	
MCA	1	
PGDCA	3	
	DAP DCA DCAP DCP DCS HDCP MCA	

14) Display the TOTAL development COST of the packages developed in EACH language.

SELECT DEV_IN AS LANGUAGE,SUM(DCOST) AS TOTCOST FROM SOFTWARE

GROUP BY DEV_IN

	LANGUAGE	TOTCOST
1	ASSEMBLY	11000
2	BASIC	6000
3	С	29100
4	COBOL	3500
5	CPP	2400
6	DBASE	55000
7	ORACLE	85000
8	PASCAL	95500

15) Display the selling cost of the package developed in EACH language. SELECT DEV_IN AS LANGUAGE,SUM(SCOST) AS SELLCOST FROM SOFTWARE

GROUP BY DEV_IN

	LANGUAGE	SELLCOST	
1	ASSEMBLY	3250.00	
2	BASIC	399.95	
3	С	8025.00	
4	COBOL	3000.00	
5	CPP	400.00	
6	DBASE	21000.00	
7	ORACLE	18000.00	
8	PASCAL	9199.95	

16) Display the cost of the package developed by EACH programmer.

SELECT NAME AS PRNAME, SUM(DCOST) AS TOTCOST FROM SOFTWARE

GROUP BY NAME

	PRNAME	TOTCOST	
1	ANAND	22000	
2	JULIANA	3500	
3	KAMALA	20000	
4	MARY	106200	
5	PATTRICK	1200	
6	QADIR	8400	
7	RAMESH	39500	
8	REMITHA	11000	
9	REVATHI	75000	
10	VIJAYA	700	

17) Display the sales values of the package developed in EACH programmer.

SELECT NAME AS PRNAME, SUM(SCOST*SOLD) AS

SALESVAL

FROM SOFTWARE

GROUP BY NAME

	PRNAME	SALESVAL
1	ANAND	84697.85
2	JULIANA	0.00
3	KAMALA	63000.00
4	MARY	183900.00
5	PATTRICK	25200.00
6	QADIR	48150.00
7	RAMESH	91796.35
8	REMITHA	54475.00
9	REVATHI	2200.00
10	VIJAYA	5400.00

18) Display the NUMBER of packages developed by EACH programmer.

SELECT NAME AS PRNAME, COUNT(TITLE) AS TOTPACKFROM SOFTWARE

GROUP BY NAME

	PRNAME	TOTPACK	
1	ANAND	2	
2	JULIANA	1	
3	KAMALA	1	
4	MARY	3	
5	PATTRICK	1	
6	QADIR	2	
7	RAMESH	2	
8	REMITHA	2	
9	REVATHI	1	
10	VIJAYA	1	

19) Display the sales COST of packages developed by EACH programmer language wise.

SELECT SUM(SCOST) AS SELLCOST FROM SOFTWARE GROUP BY DEV_IN

	SELLCOST
1	3250.00
2	399.95
3	8025.00
4	3000.00
5	400.00
6	21000.00
7	18000.00
8	9199.95

20) Display EACH programmers name, costliest package and cheapest packages developed by Him/Her.

SELECT NAME PRNAME, MIN(DCOST) CHEAPEST, MAX(DCOST) COSTLIEST

FROM SOFTWARE GROUP BY NAME

	505550000	· · · · · · · · · · · · · · · · · · ·	
	PRNAME	CHEAPEST	COSTLIEST
1	ANAND	6000	16000
2	JULIANA	3500	3500
3	KAMALA	20000	20000
4	MARY	1200	85000
5	PATTRICK	1200	1200
6	QADIR	3400	5000
7	RAMESH	4500	35000
8	REMITHA	5000	6000
9	REVATHI	75000	75000
10	VIJAYA	700	700

21) Display EACH language name with AVERAGE development cost, AVERAGE cost, selling cost and AVERAGE price per copy.

SELECT DEV_IN AS LANGUAGE, AVG(DCOST) AS AVGDEVCOST, AVG(SCOST) AS AVGSELLCOST, AVG(SCOST) AS PRICEPERCPY FROM SOFTWARE GROUP BY DEV_IN

	LANGUAGE	AVGDEVCOST	AVGSELLCOST	PRICEPERCPY
1	ASSEMBLY	5500	1625.000000	1625.000000
2	BASIC	6000	399.950000	399.950000
3	С	7275	2006.250000	2006.250000
4	COBOL	3500	3000.000000	3000.000000
5	CPP	1200	200.000000	200.000000
6	DBASE	27500	10500.000000	10500.000000
7	ORACLE	85000	18000.000000	18000.000000
8	PASCAL	31833	3066.650000	3066.650000

22) Display EACH institute name with NUMBER of courses, AVERAGE cost per course.

SELECT SPLACE AS INSTITUTE, COUNT (COURSE) AS NOOFCOURS, AVG (CCOST) AS AVGCOSTPERCOUR FROM STUDIES GROUP BY SPLACE

23) Display EACH institute name with NUMBER of students. 5
SELECT SPLACE AS INSTITUTE, COUNT(NAME) AS NOOFSTUD
FROM STUDIES GROUP BY SPLACE

	INSTITUTE	NOOFSTUD
1	APPLE	1
2	BDPS	2
3	BITS	1
4	BRILLIANT	1
5	COIT	1
6	PRAGATHI	3
7	SABHARI	3

24) Display names of male and female programmers.
SELECT NAME AS PRNAME,SEX AS SEX FROM PROGRAMMER
ORDER BY SEX

PRNAME	SEX
JULIANA	F
KAMALA	F
MARY	F
REBECCA	F
ANAND	M
ALTAF	M
NELSON	M
PATTRICK	M
QADIR	М
RAMESH	M
	JULIANA KAMALA MARY REBECCA ANAND ALTAF NELSON PATTRICK QADIR

25) Display the programmer's name and their packages. SELECT NAME AS PRNAME, TITLE AS PACKAGE FROM SOFTWARE ORDER BY NAME

	PRNAME	PACKAGE
1	ANAND	PARACHUTES
2	ANAND	VIDEOTITLING
3	JULIANA	INVENTORY
4	KAMALA	PAYROLLPRG
5	MARY	FINANCIALACC
6	MARY	CODEGENRRATOP
7	MARY	README
8	PATTRICK	README
9	QADIR	BOMBSAWAY
10	QADIR	VACCINES
11	RAMESH	HOTLIMGMT
12	RAMESH	DEADLEE
13	REMITHA	PCUTILITIES
14	REMITHA	TSRHELPPKG
15	REVATHI	HOSPITALMGMT
16	VIJAYA	TSREDITOR

26) Display the NUMBER of packages in EACH language.

SELECT COUNT(TITLE) AS NOOFPACK,DEV_IN AS LANGUAGE FROM SOFTWARE GROUP BY DEV_IN

20000000000		· · · · · · · · · · · · · · · · · · ·
	NOOFPACK	LANGUAGE
1	2	ASSEMBLY
2	1	BASIC
3	4	С
4	1	COBOL
5	2	CPP
6	2	DBASE
7	1	ORACLE
8	3	PASCAL

27) Display the NUMBER of packages in EACH language for which development cost is less than 1000.

SELECT COUNT(TITLE) AS NOOFPACK,DEV_IN AS LANGUAGE FROM SOFTWARE

WHERE DCOST<1000 GROUP BY DEV_IN

	NOOFPACK	LANGUAGE
1	1	С

28) Display the AVERAGE difference BETWEEN scost and doost for EACH language.

SELECT DEV_IN AS LANGUAGE,AVG(DCOST - SCOST) ASDIFF FROM SOFTWARE GROUP BY DEV_IN

	LANGUAGE	DIFF
1	ASSEMBLY	3875.000000
2	BASIC	5600.050000
3	С	5268.750000
4	COBOL	500.000000
5	CPP	1000.000000
6	DBASE	17000.000000
7	ORACLE	67000.000000
8	PASCAL	28766.683333

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)

	(No column name)	(No column name)	(No column name)
1	3000.00	3500	3500.00
2	1100.00	75000	72800.00

30) Display highest, lowest and average salaries for THOSE earning MORE than 2000.

SELECT MAX(SALARY), MIN(SALARY), AVG(SALARY)FROM PROGRAMMER

WHERE SALARY > 2000

	(No column name)	(No column name)	(No column name)
1	4500	2500	3040

QUERIES-3

1) Who is the highest paid C programmer?

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=(SELECT MAX(SALARY)

FROM PROGRAMMER WHERE (PROF1 LIKE 'COBOL' OR PROF2 LIKE 'COBOL'))

AND SEX LIKE 'F'

	name	dob	doj	sex	prof1	prof2	salary
1		1960-01-30	1990-04-21	F	COBOL	DBASE	3000

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

SELECT DISTINCT NAME, SALARY, PROF1 FROM PROGRAMMER WHERE (SALARY, PROF1) IN (SELECT MAX(SALARY), PROF1 FROM PROGRAMMER GROUP BY PROF1)

1 stame	salary	Plant
ANANO	3200	PASCAL.
ALTAF	2000	CUPPER
ARIANA	3000	00000
KAMALA	2900	c
MARY	4500	CPP
GADRI	3000	ASSEMBLY
RAMESH	3300	PASCAL.
REBECCA	2500	BASIC

4) Who is the LEAST experienced programmer?

```
SELECT FLOOR((SYSDATE-DOJ)/365) EXP, NAME FROM PROGRAMMER WHERE FLOOR((SYSDATE-DOJ)/365) = (SELECT MIN(FLOOR((SYSDATE-DOJ)/365)) FROM PROGRAMMER);
```

5) Who is the MOST experienced programmer?

```
SELECT FLOOR((SYSDATE-DOJ)/365) EXP, NAME, PROF1, PROF2 FROM PROGRAMMER WHERE FLOOR((SYSDATE-DOJ)/365) = (SELECT MAX(FLOOR((SYSDATE-DOJ)/365)) FROM PROGRAMMER) AND (PROF1 LIKE 'COBOL' OR PROF2 LIKE 'COBOL');
```

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
1 ORACLE
```

7) Who is the YONGEST programmer knowing DBASE?

```
SELECT FLOOR((SYSDATE-DOB)/365) AGE, NAME, PROF1, PROF2 FROM PROGRAMMER WHERE FLOOR((SYSDATE-DOB)/365) = (SELECT MIN(FLOOR((SYSDATE-DOB)/365)) FROM PROGRAMMER WHERE PROF1 LIKE 'DBASE' OR PROF2 LIKE 'DBASE');
```

8) Which institute has MOST NUMBER of students?

```
SELECT SPLACE FROM STUDIES GROUP BY SPLACE HAVING
```

```
COUNT(SPLACE) = (SELECT MAX(COUNT(SPLACE)) FROM STUDIES
GROUP BY SPLACE);
```

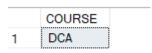
9) Who is the above programmer?

SELECT * FROM PROGRAMMER WHERE SEX = 'F' AND SALARY >3000 AND (PROF1 NOT IN('C','C++','ORACLE','DBASE') OR PROF2 NOT IN('C','C++','ORACLE','DBASE'));

	name	dob	doj	sex	prof1	prof2	salary
1		1970-06-28	1991-02-01	F	CPP	ORACLE	4500

10) Which female programmer earns MORE than 3000/- but DOES NOT know C, C++, Oracle or Dbase?

SELECT COURSE FROM STUDIES WHERE CCOST = (SELECT MAX(CCOST) FROM STUDIES);



11) Which is the COSTLIEST course?

SELECT COURSE FROM STUDIES GROUP BY COURSE HAVING
COUNT(COURSE) = (SELECT MAX(COUNT(COURSE)) FROM STUDIES GROUP
BY COURSE);

12) Which course has been done by MOST of the students?

SELECT SPLACE, COURSE FROM STUDIES WHERE CCOST < (SELECT AVG(CCOST) FROM STUDIES);



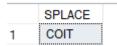
13) Display name of the institute and course Which has below AVERAGE course fee?

SELECT SPLACE, COURSE FROM STUDIES WHERE CCOST < (SELECT AVG(CCOST) FROM STUDIES);



14) Which institute conducts COSTLIEST course?

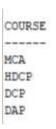
SELECT SPLACE FROM STUDIES WHERE CCOST = (SELECT MAX(CCOST) FROM STUDIES);



15) Which course has below AVERAGE number of students?

SELECT COURSE FROM STUDIES HAVING

COUNT(NAME)<(SELECT AVG(COUNT(NAME)) FROM STUDIES GROUP BY COURSE) GROUP BY COURSE;

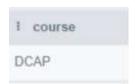


16) Which institute conducts the above course?

```
SELECT COURSE FROM STUDIES WHERE CCOST < (SELECT AVG(CCOST)+1000 FROM STUDIES) AND CCOST > (SELECT AVG(CCOST)-1000 FROM STUDIES);
```

17) Display names of the course WHOSE fees are within 1000(+ or -) of the AVERAGE fee.

```
SELECT COURSE FROM STUDIES WHERE CCOST < (SELECT AVG(CCOST)+1000 FROM STUDIES) AND CCOST > (SELECT AVG(CCOST)-1000 FROM STUDIES);
```



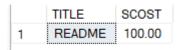
18) Which package has the HIGEST development cost?

SELECT TITLE, DCOST FROM SOFTWARE WHERE DCOST = (SELECT MAX(DCOST) FROM SOFTWARE);

	TITLE	DCOST	
1	FINANCIALACC	85000	

19) Which package has the LOWEST selling cost?

SELECT TITLE, SCOST FROM SOFTWARE WHERE SCOST = (SELECT MIN(SCOST) FROM SOFTWARE);



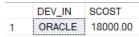
20) Who developed the package, which has sold the LEAST number of copies?

SELECT NAME, 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 FROM SOFTWARE WHERE SCOST =(SELECT MAX(SCOST) FROM SOFTWARE);



22) How many copies of the package that has the LEAST DIFFRENCE between development and selling cost were sold?

SELECT SOLD, TITLE FROM SOFTWARE WHERE TITLE = (SELECT TITLE FROM SOFTWARE WHERE (DCOST-SCOST)=(SELECT MIN(DCOST-SCOST) FROM SOFTWARE));



23) Which is the COSTLIEAST package developed in PASCAL?

SELECT TITLE FROM SOFTWARE WHERE DCOST = (SELECT MAX(DCOST) FROM SOFTWARE WHERE DEV_IN LIKE 'PASCAL');



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);



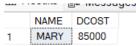
25) Which programmer has developed the HIGEST NUMBER of package?

SELECT NAME FROM SOFTWARE GROUP BY NAME HAVING MAX(NAME) = (SELECT MAX(NAME) FROM SOFTWARE);



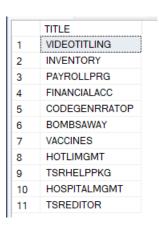
26) Who is the author of the COSTLIEST package?

SELECT NAME,DCOST 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 LIKE 'F' AND SALARY > (SELECT(MAX(SALARY)) FROM PROGRAMMER WHERE SEX LIKE '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?
- 31) Display programmer names and CHEAPEST package developed by them in EACH language?

SELECT NAME, TITLE 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, DEV_IN FROM SOFTWARE WHERE SOLD IN (SELECT MAX(SOLD) FROM SOFTWARE GROUP BY NAME) UNION SELECT NAME, DEV_IN FROM SOFTWARE WHERE SOLD IN (SELECT MIN(SOLD) FROM SOFTWARE GROUP BY NAME);

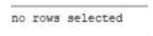
33) Display language used by EACH programmer to develop the HIGEST selling and LOWEST selling package.

SELECT NAME, DEV_IN FROM SOFTWARE WHERE SOLD IN (SELECT MAX(SOLD) FROM SOFTWARE GROUP BY NAME) UNION SELECT NAME, DEV_IN FROM SOFTWARE WHERE SOLD IN (SELECT MIN(SOLD) FROM SOFTWARE GROUP BY NAME);

	NAME	DEV_IN
1	ANAND	BASIC
2	ANAND	PASCAL
3	JULIANA	COBOL
4	KAMALA	DBASE
5	MARY	CPP
6	MARY	ORACLE
7	PATTRICK	CPP
8	QADIR	ASSEMBLY
9	QADIR	C
10	RAMESH	DBASE
11	RAMESH	PASCAL
12	REMITHA	ASSEMBLY
13	REMITHA	C
14	REVATHI	PASCAL
15	VIJAYA	С

34) Who is the OLDEST female programmer WHO joined in 1992

SELECT NAME FROM PROGRAMMER WHERE DOJ=(SELECT (MIN(DOJ)) FROM PROGRAMMER WHERE TO_CHAR(DOJ,'YYYY') LIKE '1992');



35) In WHICH year where the MOST NUMBER of programmer born? SELECT DISTINCT TO_CHAR(DOB,'YYYY') FROM PROGRAMMER WHERE TO_CHAR(DOJ,'YYYY') = (SELECT MIN(TO_CHAR(DOJ,'YYYY')) FROM PROGRAMMER);

36) In WHICH month did MOST NUMBRER of programmer join? SELECT DISTINCT TO_CHAR(DOJ,'MONTH') FROM PROGRAMMER WHERE TO_CHAR(DOJ,'MON') = (SELECT MIN(TO_CHAR(DOJ,'MON')) FROM PROGRAMMER);

APRIL

37) In WHICH language are MOST of the programmer's proficient?

SELECT NAME FROM PROGRAMMER WHERE SEX = 'M' AND SALARY < (SELECT(AVG(SALARY))FROM PROGRAMMER WHERE SEX = 'F');

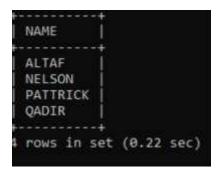
	NAME	
1	ANAND	
2	ALTAF	
3	NELSON	
4	PATTRICK	
5	QADIR	
6	RAMESH	

38) Who are the male programmers earning BELOW the AVERAGE salary of female

Programmer;

SELECT NAME FROM PROGRAMMER WHERE SEX LIKE 'M'

AND SALARY < (SELECT(AVG(SALARY)) FROM PROGRAMMER WHERE SEX LIKE 'F')



QUERIES-4

1) Display the details of THOSE WHO are drawing the same salary.

select name, salary from programmer where salary = any(select salary from programmer p group by salary having salary=p.salary and count(*)>1);

		•
	name	salary
1	ANAND	3200
2	ALTAF	2800
3	JULIANA	3000
4	NELSON	2500
5	PATTRICK	2800
6	QADIR	3000
7	RAMESH	3200
8	REBECCA	2500

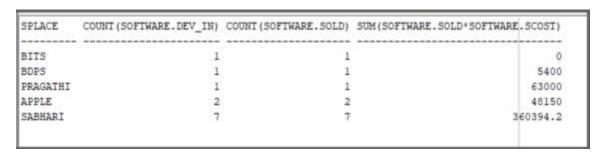
- 2) Display the details of software developed by male programmers earning MORE than 3000.
- 3) Display details of packages developed in PASCAL by female programmers.
- 4) Display the details of the programmer WHO joined BEFORE 1990.
- 5) Display details of software developed in C by female programmers of PRAGATHI.

select s.* from software s,studies st,programmer p where s.name=st.name and p.name=s.name and sex='f' and splace='pragathi';



6) Display NUMBER of packages NUMBER of copies sold and sales value of EACH programmer Institute-wise.

Select studies.splace, count(software.dev_in), count(software.sold), sum(software.sold*software.scost) from software,studies where software.name=studies.name group by studies.splace;



- 7) Display details of software developed in DBASE by male programmers WHO belong to the institute on which MOST NUMBER OF programmer's studies.
- 8) Display the details of the software that was developed by male programmers born BEFORE 1965 and female programmers born AFTER 1975.
- 9) Display the details of the software that was developed in the language that is NOT the programmer's first proficiency.

select distinct x.* from software x, programmer y where y.prof1 <>x.dev_in and x.name = y.name;

	name	title	dev_in	scost	dcost	sold
1	ANAND	PARACHUTES	BASIC	399.95	6000	43
2	KAMALA	PAYROLLPRG	DBASE	9000.00	20000	7
3	MARY	CODEGENRRATOP	С	4500.00	20000	23
4	MARY	FINANCIALACC	ORACLE	18000.00	85000	4
5	PATTRICK	README	CPP	300.00	1200	84
6	QADIR	VACCINES	С	1900.00	3400	21
7	RAMESH	HOTLIMGMT	DBASE	12000.00	35000	4

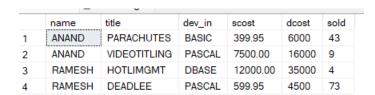
10) Display details of software that was developed in the language which is NEITHER first NOR second proficiency of the programmer.

select s.* from programmer p,software s where s.name=p.name and(dev_in <> prof1 and dev_in <> prof2);



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

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



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

select name from programmer where name not in(select name fromsoftware);

	name
1	ALTAF
2	NELSON
3	REBECCA

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

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

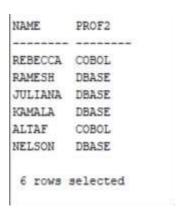


14) Who are the programmers WHO JOINED in the same day?

select a.name,a.doj from programmer a,programmer b where a.doj=b.dojand a.name <> b.name;

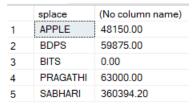
		_	
	name	doj	
1	JULIANA	1990-04-21	
2	PATTRICK	1990-04-21	

15) Who are the programmers WHO HAVE THE SAME PROF2? select unique(a.name),a.prof2 from programmer a,programmer bwhere a.prof2=b.prof2 and a.name <> b.name;



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

select studies.splace,sum(software.sold*software.scost) from software,studies where studies.name=software.name group by studies.splace;



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

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



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 fromsoftware)

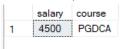
union select prof2 from programmer where prof2 not in(select dev_infrom software);



19) How much does the person WHO developed the HIGHEST selling package earn and WHAT course did he/she undergo?

select p1.salary,s2.course from programmer p1,software s1,studies s2

where p1.name=s1.name and s1.name=s2.name and scost=(select max(scost) from software);



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

select p.name,ceil(ccost/salary) from programmer p,studies s where s.name=p.name;

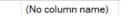
21) What is the AVERAGE salary for those WHOSE software's sales value is more than 50,000?

select avg(salary)from programmer p,software s where p .name=s.nameand sold*scost>50000;



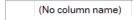
22) How many packages were developed by the students WHO studied in the institute that Charge the LOWEST course fee?

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



23) How many packages were developed by the person WHO developed the CHEAPEST package Where did he\she study?

select count(*) from programmer p,software s where s .name=p.namegroup by dev_in having min(dcost)=(select min(dcost) from software);



24) How many packages were developed by female programmers earning MORE than the HIGHEST paid male programmer?

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



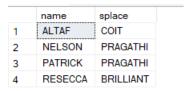
25) How many packages were developed by the MOST experienced programmers from BDPS?

select count(*) from software s,programmer p where p.name=s.namegroup by doj having max(doj)=(select max(doj) from studies st,programmer p, software s where p.name=s.name and st.name=p.name and (splace='bdps'));

(No column name)

26) 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);



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

select count(*),sum(scost*sold-dcost) "PROFIT" from softwarewhere dev_in in (select prof1 from programmer) group by dev_in;

	(No column name)	PROFIT
1	2	14750.00
2	1	11197.85
3	4	156675.00
4	1	-3500.00
5	2	31200.00
6	3	17996.35

28) List programmer names (from programmer table) and number of packagesEACH developed.

select s.name,count(dev_in) from programmer p1,software swhere

p1.name=s.name group by s.name;

	name	(No column name)
1	ANAND	2
2	JULIANA	1
3	KAMALA	1
4	MARY	3
5	PATTRICK	1
6	QADIR	2
7	RAMESH	2