SNEKA P

# SQL ASSESSMENT

## 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 100 + MONTHS_BETWEEN(SYSDATE,DOB)/12 FROM
PROGRAMMER;
```

**3) Display the names and ages of all the programmers.**

```
SELECT NAME
FROM STUDIES
WHERE COURSE LIKE 'DAP'
```

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

```
SELECT MAX(SOLD) FROM SOFTWARE
```

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

```
SELECT DOB,NAME
FROM PROGRAMMER
WHERE TO_CHAR(DOB,'MON') LIKE 'JAN'
```

**6) Display lowest course fee.**

```
SELECT MIN(CCOST) FROM STUDIES
```

**7) How many programmer has done PGDCA course.**

```
SELECT COUNT(NAME)
FROM STUDIES
WHERE COURSE LIKE 'PGDCA'
```

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

```
SELECT SUM(SOLD*SCOST)
FROM SOFTWARE
WHERE DEV_IN LIKE 'C'
```

**9) Display the details of software developed by Ramesh?**

```
SELECT *
FROM SOFTWARE
WHERE NAME='RAMESH'
```

**10) How many programmers studied at SABHARI.**

```
SELECT COUNT(NAME) AS NOPROGRAMMERS
FROM STUDIES
WHERE SPLACE='SABHARI'
```

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

```
SELECT *
FROM SOFTWARE
WHERE (SOLD*SCOST)>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*SOLDDCOST
```

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

```
SELECT MAX (SCOST) FROM SOFTWARE WHERE DEV_IN
LIKE 'BASIC';
```

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

```
SELECT * FROM SOFTWARE WHERE (SOLD*SCOST)>DCOST;
```

**15) How many packages were developed in dbase?**

```
SELECT COUNT(TITLE) AS TOTAL
FROM SOFTWARE
WHERE DEV_IN='DBASE'
```

**16) How many programmers studies at paragathi?**

```
SELECT COUNT(NAME)
FROM STUDIES
WHERE SPLACE='PRAGATHI'
```

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

```
SELECT COUNT(NAME) AS NOOFPROGRAMMERS
FROM STUDIES
WHERE CCOST>=5000
AND CCOST<=10000
```

**18) What is the average course fee?**

```
SELECT AVG(CCOST) AS AVERAGECOST
FROM STUDIES
```

**19) Display the details of programmers knowing c?**

```
SELECT * FROM PROGRAMMER WHERE PROF1='C' OR PROF2='C'
```

**20) How many programmers know either Cobol or Pascal?**

```
SELECT COUNT(NAME) AS PROGRAMMERS FROM
PROGRAMMER
WHERE PROF1='COBOL' OR PROF1='PASCAL' OR PROF2='COBOL'
OR PROF2='PASCAL'
```

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

```
SELECT COUNT(NAME) AS PROGRAMMER FROM PROGRAMMER
WHERE PROF1!='C' AND PROF1!='PASCAL' AND PROF2!='C' AND
PROF2!='PASCAL'
```

**22) How old is the oldest male programmers?**

```
SELECT MAX(FLOOR((SYSDATE - DOB)/365)) AS
OLDESTMALEPROGRAMMERAGE FROM PROGRAMMER
```

**23) What is the average age of female programmers?**

```
SELECT FLOOR(AVG(FLOOR((SYSDATE - DOB)/365))) AS
AVERAGEFEMALEAGE FROM PROGRAMMER
```

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

SELECT NAME AS PRNAME,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) AS NOFPROG FROM PROGRAMMER WHERE SEX='F'

**27) What are the languages known by the male programmers?**

SELECT DISTINCT PROF1 AS LANGUAGES FROM PROGRAMMER WHERE SEX='M' UNION SELECT DISTINCT PROF2 AS LANGUAGES FROM PROGRAMMER WHERE SEX='M'

**28) What is the Average salary?**

SELECT AVG(SALARY) AS AVGSAL FROM PROGRAMMER

**29) How many people draw 2000 to 4000?**

SELECT NAME AS PRNAME FROM PROGRAMMER WHERE SALARY>= 2000
OR SALARY <=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')

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

SELECT COUNT(NAME) AS NOOFFPRG FROM PROGRAMMER WHERE SEX='F' AND (PROF1='C' OR PROF2='C') AND ((SYSDATE-DOB)/365) > 24

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

SELECT NAME
FROM PROGRAMMER
WHERE TO_CHAR(DOB,'WW') LIKE TO_CHAR(SYSDATE,'WW')

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

SELECT *
FROM PROGRAMMER
WHERE FLOOR((SYSDATE - DOJ)/365)<1

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

SELECT NAME AS PRNAME FROM PROGRAMMER WHERE FLOOR((SYSDATE-DOJ)/365)=2;

**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)2
AND SEX='F'
AND (PROF1='COBOL' OR PROF2='COBOL')
```

**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';
```

**38) Display the institutes names from the studies table without duplicates?**

```
SELECT DISTINCT SPLACE FROM STUDIES;
```

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

```
SELECT 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
'%A%A%';
```

**41) Display the names of programmers whose names contain upto 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');
```

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

```
SELECT MIN(LENGTH(NAME)) AS SHORTNAME
FROM PROGRAMMER
```

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

```
SELECT AVG(DCOST) AS AVGCOST
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?**

```
SELECT NAME AS PRNAME, SEX AS SEX,
SUBSTR(DOB,1,2)'/'SUBSTR(DOB,4,3)'/'SUBSTR(DOB,8,2) AS
DATEOFBIRTH,
SUBSTR(DOJ,1,2)'/'SUBSTR(DOJ,4,3)'/'SUBSTR(DOJ,8,2) AS
DATEOFJOIN FROM PROGRAMMER
```

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

```
SELECT NAME AS PRNAME
FROM PROGRAMMER
WHERE LAST_DAY(DOB) LIKE DOB
```

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

```
SELECT SALARY AS SALOFPR
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 AS SOFTNAME,SCOST AS SOFTCOST,DCOST AS
DEVCOST,DCOST - SCOST DIFF FROM SOFTWARE
ORDER BY 4 DESC
```

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

```
SELECT NAME AS PRNAME
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 AS PACKAGES
FROM SOFTWARE
WHERE TITLE LIKE '% %'
```

## QUERIES - II

**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
```

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

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

**3) Display THE NUMBER OF male and female programmer.**

```
SELECT SEX,COUNT(NAME) AS NAME
FROM PROGRAMMER
GROUP BY SEX
```

**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(DOJ,'YY') AS YEAR,COUNT(NAME) AS PRNO
FROM PROGRAMMER
GROUP BY TO_CHAR(DOJ,'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)
```

**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)
```

**9) Display the language wise COUNTS of prof1.**

```
SELECT PROF1 AS LANGUAGE, COUNT(PROF1) AS PROF1COUNT
FROM PROGRAMMER
GROUP BY PROF1
```

**10) Display the language wise COUNTS of prof2.**

```
SELECT PROF2 AS LANGUAGE, COUNT(PROF2) AS PROF2COUNT
FROM PROGRAMMER
GROUP BY PROF2
```

**11) Display THE NUMBER OF people in EACH salary group.**

```
SELECT SALARY,COUNT(NAME) AS PEOPLE
FROM PROGRAMMER
GROUP BY SALARY
```

**12) Display THE NUMBER OF people who studied in EACH institute.**

```
SELECT SPLACE AS INSTITUTE,COUNT(NAME) AS PEOPLE
FROM STUDIES
GROUP BY SPLACE
```

**13) Display THE NUMBER OF people who studied in EACH course**.

```
SELECT COURSE AS STUDY,COUNT(NAME) AS PEOPLE
FROM STUDIES GROUP BY COURSE
```

**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
```

**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
```

**16) Display the cost of the package developed by EACH**

**programmer.**

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

**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
```

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

```
SELECT NAME AS PRNAME,COUNT(TITLE) AS TOTPACK
FROM SOFTWARE
GROUP BY NAME
```

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

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

**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
```

**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
```

**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.**

```
SELECT SPLACE AS INSTITUTE,COUNT(NAME) AS NOOFSTUD
FROM STUDIES
GROUP BY SPLACE
```

**24) Display names of male and female programmers.**

```
SELECT NAME AS PRNAME,SEX AS SEX
FROM PROGRAMMER
ORDER BY SEX
```

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

```
SELECT NAME AS PRNAME,TITLE AS PACKAGE
FROM SOFTWARE
ORDER BY NAME
```

**26) Display the NUMBER of packages in EACH language.**

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

**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
```

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

```
SELECT DEV_IN AS LANGUAGE,AVG(DCOST - SCOST) AS DIFF
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 MAX(SALARY), MIN(SALARY), AVG(SALARY)
FROM PROGRAMMER
WHERE SALARY > 2000
```

## QUERIES - III

**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';
```

**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);
```

**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;
```

**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 NAME FROM PROGRAMMER WHERE PROF1 IN (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 UNION SELECT NAME
FROM PROGRAMMER WHERE PROF2 IN (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;
```

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

```
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'));
```

**11) Which is the COSTLIEST course?**

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

**15) Which course has below AVERAGE number of students?**

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

**16) Which institute conducts the above course?**

SELECT SPLACE FROM STUDIES WHERE COURSE IN (SELECT COURSE FROM STUDIES GROUP BY COURSE HAVING COUNT(NAME) < (SELECT AVG(COUNT(NAME)) FROM STUDIES GROUP BY COURSE));

**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);

**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 = '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 SOLD*SCOST >
2*DCOST;
```

**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 FROM PROGRAMMER WHERE DOB=(SELECT
(MAX(DOB)) FROM PROGRAMMER WHERE TO_CHAR(DOB,'YYYY')
LIKE '1965');
```

**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);
```

**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);
```

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

```
SELECT PROF1 FROM PROGRAMMER GROUP BY PROF1 HAVING
COUNT(PROF1)=(SELECT  MAX(COUNT(PROF1)) FROM
PROGRAMMER GROUP BY PROF1) OR COUNT(PROF2)=(SELECT
MAX(COUNT(PROF2)) FROM PROGRAMMER GROUP BY PROF2)

UNION

SELECT PROF2 FROM PROGRAMMER GROUP BY PROF2 HAVING
COUNT(PROF1)=(SELECT MAX(COUNT(PROF1)) FROM
PROGRAMMER   GROUP BY PROF1) OR COUNT(PROF2)=(SELECT
MAX(COUNT(PROF2)) FROM PROGRAMMERGROUP BY PROF2);
```

**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 = '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);

**2) Display the details of software developed by male programmers earing MORE than 3000.**

select software.* from programmer p,software s where p.name=s.name and salary>3000 and sex='m';

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

select s.* from programmer p,software s where p.name=s.name and sex='f' and dev_in='pascal';

**4) Display the details of these programmer WHO joined BEFORE 1990.**

select * from programmer where to_char(doj,'yy')<90;

**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 programmers studies.**

select software.* from programmer,software,studies where programmer.name=software.name and software.name=studies.name and programmer.name=studies.name and sex='m' and dev_in='dbase' and splace= (select splace from studies group by splace having count(splace) =(select max(count(splace))from studies group by splace));

**8) Display the details of the software that was developed by male programmers born BEFORE 1965 and female programmers born AFTER 1975.**

```
select software.* from programmer p,software s where s.name=p.name
and sex='m' and to_char(dob,'yy')<64 or sex='f' and
To_char(dob,'yy')>75);
```

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

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

**10) Display details of software that was developed in the language which is NITHER 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 from software);
```

**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.doj and a.name <> b.name;
```

**15) Who are the programmers WHO HAVE THE SAME PROF2?**

```
select name from programmer where prof2 = any(select prof2 from programmer group by prof2 having count(*) >1);
```

**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 from software) union select prof2 from programmer where prof2 not in(select dev_in from 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) Which is the COSTLIEST package developed by a person with under 3 years expenence?**

select x.title from software x, programmer y where (months_between(sysdate, y.doj)/12) > 3 and x.name=y.name;

**22) 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.name and sold*scost>50000;

**23) 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.name group by s.name,ccost having min(ccost)=(select min(ccost) from studies);

**24) 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.name group by dev_in having min(dcost)=(select min(dcost) from software);

**25) 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 programmer p,software s where s.name=p.name and sex='m');

**26) How many packages were developed by the MOST experienced programmers from BDPS.**

select count(x.name) from software x, programmer y, studies x where months_between(sysdate, y.doj)/12) = (select max(months_between(sysdate,y.doj)/12) from programmer y, studies = where x.splace = 'BDPS' and y.name = z.name) and x.name=y.name andz.splace='BDPS';

**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);

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

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

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

select s.name,count(dev_in) from programmer p1,software s where p1.name=s.name group by s.name;

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

select programmer.* from programmer,studies where splace='SSIL' and programmer.name=software.name and programmer.name=studies.name and studies.splace='s.s.i.l.';