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

SELECT AVG (SCOST) FROM SOFTWARE WHERE DEV IN LIKE 'PASCAL';



2.) What is the highest numbers of copies sold by a package? SELECT MAX(scost) FROM SOFTWARE;



3) Display lowest course fee.

SELECT MIN(CCOST) FROM STUDIES;

	Re	sult Grid   🚻	Filter Rows:	Export: ⊞   Wrap Ce
		MIN(COST)		
)	•	1500		

4) How many programmer has done PGDCA course.

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



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

SELECT SUM(SOLD\*SCOST) FROM SOFTWARE WHERE DEV IN LIKE 'C';



6) Display the details of software developed by Pavithra?



7) How many programmers studied at dcs.

SELECT COUNT (NAME) AS NOPROGRAMMERS FROM STUDIES WHERE SPLACE='dcs';



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

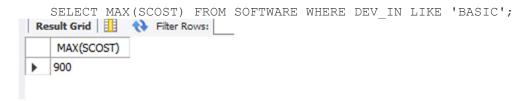
	SELECT	* FROM SO	FTWARE	WHERE	(SOLI	*SCOST)	>200
Re	esult Grid	♦ Filter Rov	vs:		Edit	: 👍 🖶	
	name	title	dev_in	scost	dcost	number	
•	Akash	medicare	basic	900	17000	20	
	Dharanitha	FlowerShop	Python	400	15000	20	
	Ilakia	EmployeeApp	Python	500	10000	20	
	Krishanth	PastryShop	Java	800	10000	16	
	oviya	Grocery	Pascal	500	16000	14	
	Pavithra	webapp	Java	200	12000	18	
	Pawan	Management	Pascal	600	12300	14	
	Priya	Parachute	basic	600	18000	16	
	NULL	NULL	NULL	NULL	NULL	NULL	

9) 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;



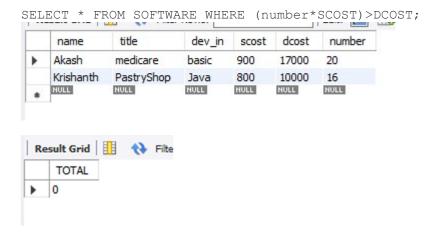
10) What is the price of the costliest software developed in BASIC?



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

SELECT \* FROM SOFTWARE WHERE (\*SCOST)>DCOST;

12) How many packages were developed in dbase? SELECT COUNT (TITLE) AS TOTAL FROM SOFTWARE WHERE DEV IN='DBASE';

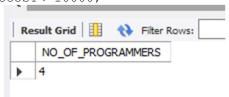


13) How many programmers studies at sabari?

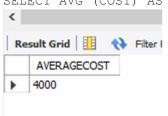


14) How many programmers paid 5000 to 10000 for their course?

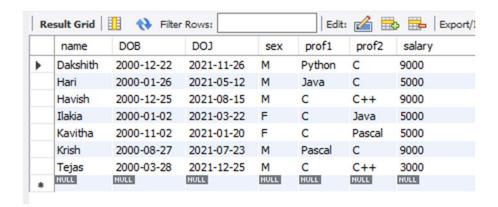
SELECT COUNT(NAME) AS NO\_OF\_PROGRAMMERS FROM STUDIES WHERE CCOST>=5000 AND CCOST<=10000;



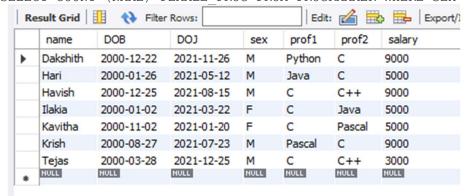
15) What is the average course fee?
SELECT AVG (COST) AS AVERAGECOST FROM STUDIES;



16) Display the details of programmers knowing c?
SELECT \* FROM PROGRAMMER WHERE PROF1='C' OR PROF2='C';



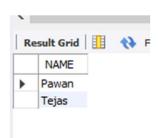
17) How many female programmers are there?
SELECT COUNT (NAME) FEMALE PROG FROM PROGRAMMER WHERE SEX='F';



18) What is the Average salary?

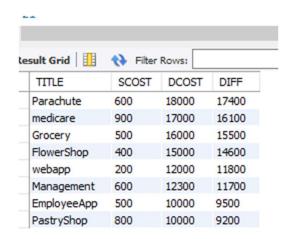
19) How many people draw 2000 to 4000?

SELECT NAME FROM PROGRAMMER WHERE SALARY BETWEEN 2000 AND 4000;



20) 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;



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

SELECT NAME FROM PROGRAMMER WHERE LAST DAY(DOB) = DOB;



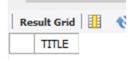
22) Display the name, sex, dob(DD/MM/YY format), doj for all the programmers without using conversion function?

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;



23) Display the names of the packages whose names contain more than 1 word?

SELECT TITLE FROM SOFTWARE WHERE TITLE LIKE '% %';



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

SELECT MIN(LENGTH(NAME)) FROM PROGRAMMER;



25) Display the names of programmers whose names contain upto 5 characters?

SELECT NAME FROM PROGRAMMER WHERE LENGTH (NAME) =5;



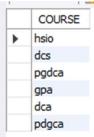
**26)** Display the names of the programmers whose names contain 2 occurrences of the letter A?

SELECT NAME FROM PROGRAMMER WHERE NAME LIKE '%A%A%';

	NAME
Þ	Aarav
	Ilakia
	Kavitha
	pavithra
	Pawan

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

SELECT DISTINCT COURSE FROM STUDIES;



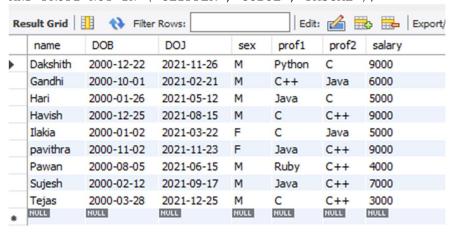
28) Display the institutes names from the studies table without duplicates?

SELECT DISTINCT SPLACE FROM STUDIES;

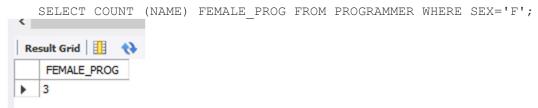


29) Display the details of those who don't know Clipper, Cobol or Pascal?

SELECT \* FROM PROGRAMMER WHERE PROF1 NOT IN ('CLIPPER', 'COBOL', 'PASCAL') AND PROF2 NOT IN ('CLIPPER', 'COBOL', 'PASCAL');



30) How many female programmers are there?



31) 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');



32) 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');



33) 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';



34) 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);



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;



9) 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

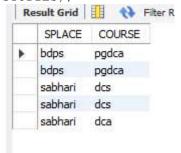
IN('C','C++','ORACLE','DBASE'));

	name	DOB	DOJ	sex	prof1	prof2	salary
•	Ilakia	2000-01-02	2021-03-22	F	С	Java	5000
	Kavitha	2000-11-02	2021-01-20	F	C	Pascal	5000
	pavithra	2000-11-02	2021-11-23	F	Java	C++	9000
	NULL	NULL	NULL	NULL	NULL	NULL	NULL

10) Which is the COSTLIEST course?

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

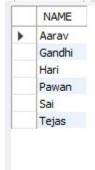
SELECT SPLACE, COURSE FROM STUDIES WHERE CCOST < (SELECT AVG(CCOST) FROM STUDIES);



13) Which institute conducts COSTLIEST course?

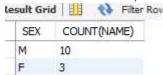
Who are the male programmers earning BELOW the AVERAGE salary of female programmers?

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



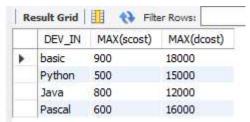
3) Display THE NUMBER OF male and female programmer.

SELECT SEX, COUNT (NAME) FROM PROGRAMMER GROUP BY SEX;



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

SELECT DEV IN, MAX(SCOST), MAX(dcost) FROM SOFTWARE GROUP BY DEV IN;



Display THE NUMBER OF people BORN in EACH YEAR.

SELECT TO\_CHAR(DOB,'YY') AS YEAR, COUNT(NAME) FROM PROGRAMMER GROUP BY TO CHAR(DOB,'YY');

	YEAR	COUNT(NAM
•	2000-11-14	1
	2000-12-22	1
	2000-10-01	1
	2000-01-26	1
	2000-12-25	1
	2000-01-02	1
	2000-11-02	2
	2000-08-27	1
	2000-08-05	1
	2000-12-23	1
	2000-02-12	1
	2000-03-28	1

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

SELECT TO\_CHAR(DOJ,'YY') AS YEAR, COUNT(NAME) FROM PROGRAMMER GROUP BY TO CHAR(DOJ,'YY');



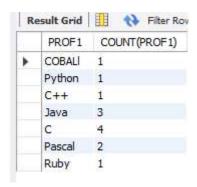
7) Display THE NUMBER OF people BORN in EACH MONTH.

SELECT SUBSTR(DOB, 4, 3), COUNT(NAME) FROM PROGRAMMER GROUP BY SUBSTR(DOB, 4, 3);



9) Display the language wise COUNTS of prof1.

SELECT PROF1, COUNT(PROF1) FROM PROGRAMMER GROUP BY PROF1;



10) Display the language wise COUNTS of prof2.

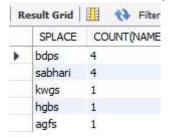
11) Display THE NUMBER OF people in EACH salary group.

SELECT SALARY, COUNT (NAME) FROM PROGRAMMER GROUP BY SALARY;



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

SELECT SPLACE, COUNT (NAME) FROM STUDIES GROUP BY SPLACE;



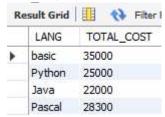
13) Display THE NUMBER OF people who studied in EACH course.

SELECT COURSE , COUNT (NAME) FROM STUDIES GROUP BY COURSE;

COURSE	COUNT(NAME)
hsio	1
dcs	4
pgdca	2
gpa	1
dca	2
pdgca	1

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

SELECT DEV\_IN LANG, SUM(DCOST) TOTAL\_COST FROM SOFTWARE GROUP BY DEV IN;



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

SELECT NAME, SUM (DCOST) AS TOTAL\_COST FROM SOFTWARE GROUP BY NAME;

	NAME	TOTAL_COST	
١	Akash	17000	
	Dharanitha	15000	
	Ilakia	10000	
	Krishanth	10000	
	oviya	16000	
	Pavithra	12000	
	Pawan	12300	
	Priya	18000	

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

SELECT NAME, COUNT (TITLE) AS TOTAL PACK FROM SOFTWARE GROUP BY NAME;



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

SELECT DEV\_IN, SUM(SCOST) FROM SOFTWARE GROUP BY DEV\_IN;

	DEV_IN	SUM(SCOST)
•	basic	1500
	Python	900
	Java	1000
	Pascal	1100

20) Display EACH programmers name, costliest package, cheapest packages developed by His/Her?

SELECT NAME, MIN(DCOST), MAX(DCOST) FROM SOFTWARE GROUP BY NAME;

	NAME	MIN(DCOST)	MAX(DCOST)	
•	Akash	17000	17000	
	Dharanitha	15000	15000	
	Ilakia	10000	10000	
	Krishanth	10000	10000	
	oviya	16000	16000	
	Pavithra	12000	12000	
	Pawan	12300	12300	
	Priya	18000	18000	

21) Display EACH language name with AVERAGE development cost, AVERAGE cost, selling

cost and AVERAGE price per copy.

SELECT DEV\_IN, AVG(DCOST), AVG(SCOST), AVG(SCOST) FROM SOFTWARE GROUP BY DEV IN;



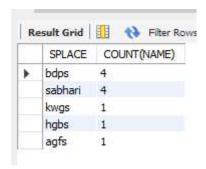
22) Display EACH institute name with NUMBER of courses, AVERAGE cost per course.

SELECT SPLACE, COUNT (COURSE), AVG (CCOST) FROM STUDIES GROUP BY SPLACE;

	SPLACE	COUNT(COURSE)	AVG(COST)	
•	bdps	4	4250	
	sabhari	4	3375	
	kwgs	1	5000	
	hgbs 1		4500	
	agfs	1	4000	

23) Display EACH institute name with NUMBER of students.

SELECT SPLACE, COUNT (NAME) FROM STUDIES GROUP BY SPLACE;



24) Display names of male and female programmers.

SELECT NAME, SEX FROM PROGRAMMER ORDER BY SEX;

		147 71 111 /
	NAME	SEX
<b>&gt;</b>	Ilakia	F
	Kavitha	F
	pavithra	F
	Aarav	M
	Dakshith	M
	Gandhi	M
	Hari	M
	Havish	M
	Krish	M
	Pawan	M
	Sai	M
$\cap \Gamma \setminus \tau$		. 1

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

SELECT NAME, TITLE FROM SOFTWARE ORDER BY NAME;

Suit Grid	Filler Novis:
NAME	TITLE
Akash	medicare
Dharanitha	FlowerShop
Ilakia	EmployeeApp
Krishanth	PastryShop
oviya	Grocery
Pavithra	webapp
Pawan	Management
Priya	Parachute
	Akash Dharanitha Ilakia Krishanth oviya Pavithra Pawan

26) Display the NUMBER of packages in EACH language.

SELECT COUNT(TITLE), DEV IN FROM SOFTWARE GROUP BY DEV IN;

	COUNT(TITLE)	DEV_IN	
•	2	basic	
	2	Python	
	2	Java	
	2	Pascal	

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

SELECT COUNT(TITLE), DEV\_IN FROM SOFTWARE WHERE DCOST<1000 GROUP BY DEV\_IN;



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

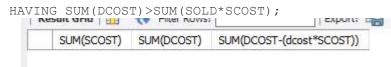
SELECT DEV IN, AVG (DCOST - SCOST) FROM SOFTWARE GROUP BY DEV IN;

DEV_IN	AVG(DCOST - SCOST)
basic	16750.0000
Python	12050.0000
Java	10500.0000
Pascal	13600.0000

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



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;



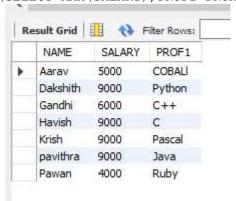
1) Who is the highest paid C programmer?

SELECT \* FROM PROGRAMMER WHERE SALARY=(SELECT MAX(SALARY) FROM PROGRAMMER WHERE PROF1 LIKE 'C' OR PROF2 LIKE 'C');

•	Dakshith	2000-12-22	2021-11-26	М	Python	С	9000
	Havish	2000-12-25	2021-08-15	M	C	C++	9000
	Krish	2000-08-27	2021-07-23	M	Pascal	C	9000
	pavithra	2000-11-02	2021-11-23	F	Java	C++	9000
	NULL	NULL	NULL	NULL	NULL	NULL	NULL

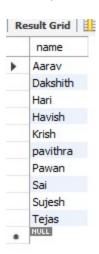
3) Display the name of the HIGEST paid programmer for EACH language (prof1)

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



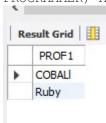
4) Who is the LEAST experienced programmer?

SELECT name FROM PROGRAMMER WHERE FLOOR(DATEDIFF(CURRENT TIMESTAMP, DOJ)/365)1;



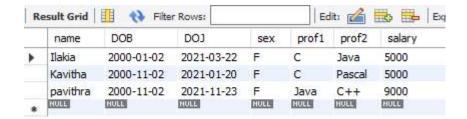
6) Which language is known by ONLY ONE programmer?

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;



9) 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'));



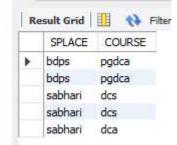
10) Which is the COSTLIEST course?

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



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

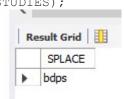
SELECT SPLACE, COURSE FROM STUDIES WHERE CCOST < (SELECT AVG(CCOST) FROM



STUDIES);

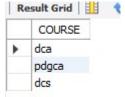
13) Which institute conducts COSTLIEST course?

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



16) 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);



17) Which package has the HIGEST development cost?

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



18) Which package has the LOWEST selling cost?

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



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);



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);



22) Which is the COSTLIEAST package developed in PASCAL?

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



23) 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);



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

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



25) Who is the author of the COSTLIEST package?

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



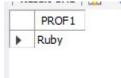
26) Display names of packages WHICH have been sold LESS THAN the AVERAGE number of copies?

SELECT TITLE FROM SOFTWARE WHERE SOLD < (SELECT AVG(SOLD) FROM SOFTWARE);



28) 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);



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;



30) 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);



31) 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');

32) 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
•	Akash	basic
	Dharanitha	Python
	Ilakia	Python
	Krishanth	Java
	oviya	Pascal
	Pavithra Java	
	Pawan	Pascal
	Priya	basic

33) 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');

34) 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);

37) 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');

