ASSIGNMENT SQL

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Author(s): SOWMIYA V

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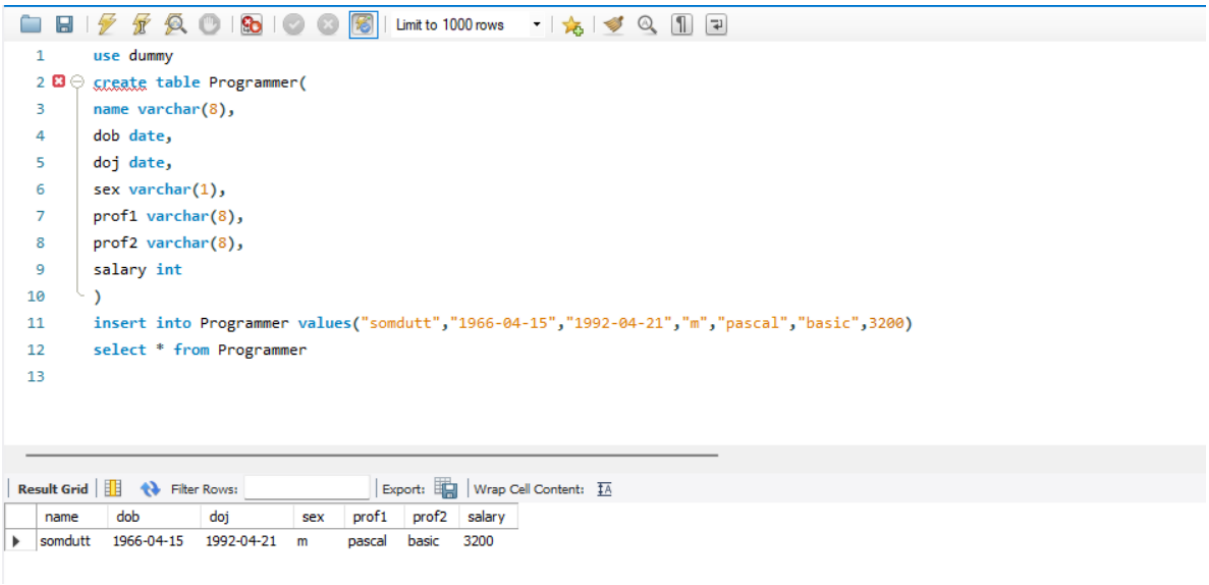
ASSIGNMENT SQL

Question 1:

1) Table Name	Programmer		
name	not null	varchar2(8)	name
dob	not null	date	date of birth
doj	not null	date	date of joining
sex	not null	varchar2(1)	male/ female
prof1		varchar2(8)	known language 1
prof2		varchar2(8)	known language 2
salary	not null	number(4)	salary

Sample Data						
somdutt	21-Apr-66	21-Apr-92	m	pascal	basic	3200

Commands:



// data – “yyyy-mm-dd”

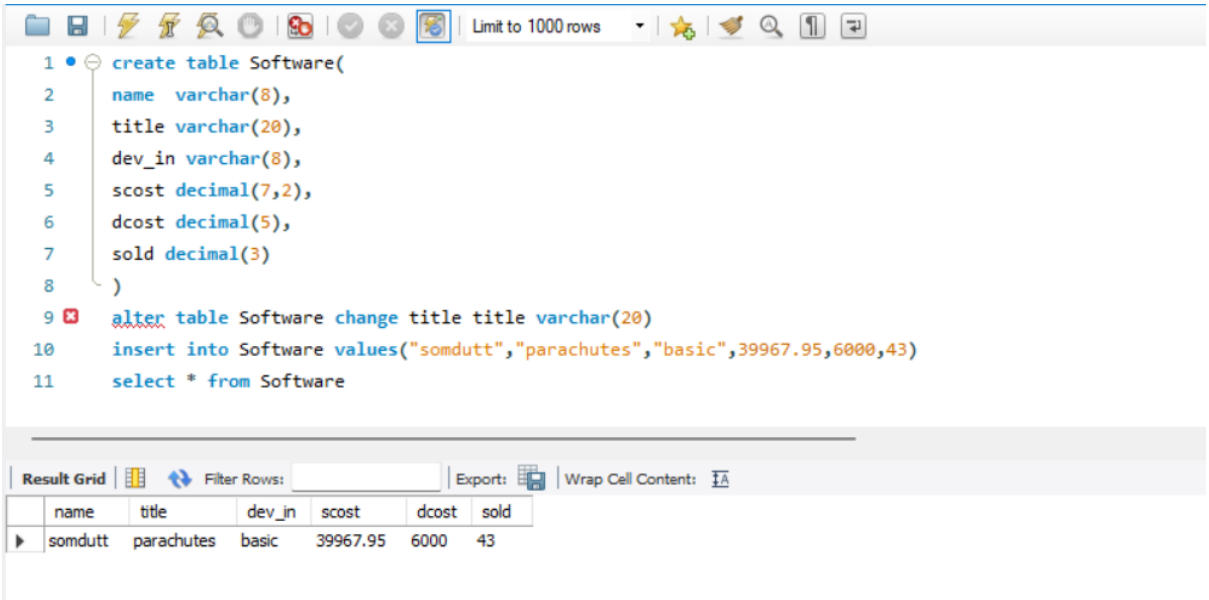
Question 2:

2) Table Name	Software		
name	not null	varchar2(8)	name
title	not null	varchar2(20)	developed project name
dev_in	not null	varchar2(8)	language developed
scost		number(7,2)	software cost
dcost		number(5)	development cost
sold		number(3)	number of software sold

Sample Data					
somdutt	parachutes	basic	399.95	6000	43

If a DECIMAL(5) column is defined, it means that the column can store numbers with up to 5 digits in total.

Commands:

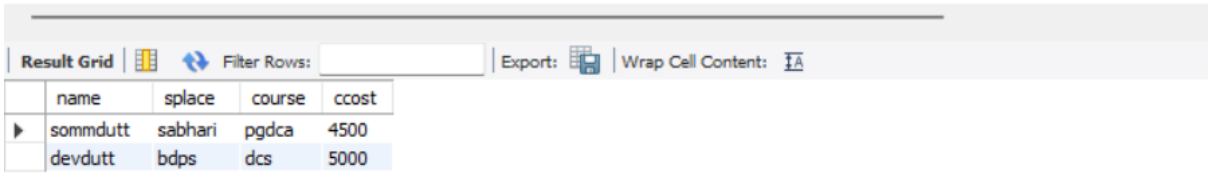


Question 3:

3) Table Name	Studies		
name	not null	varchar2(8)	name
splace	not null	varchar2(9)	studies place
course	not null	varchar2(5)	course studies
ccost	not null	varchar2(5)	course cost

Sample Data			
somdutt	sabhari	pgdca	4500
devdutt	bdps	dcs	5000

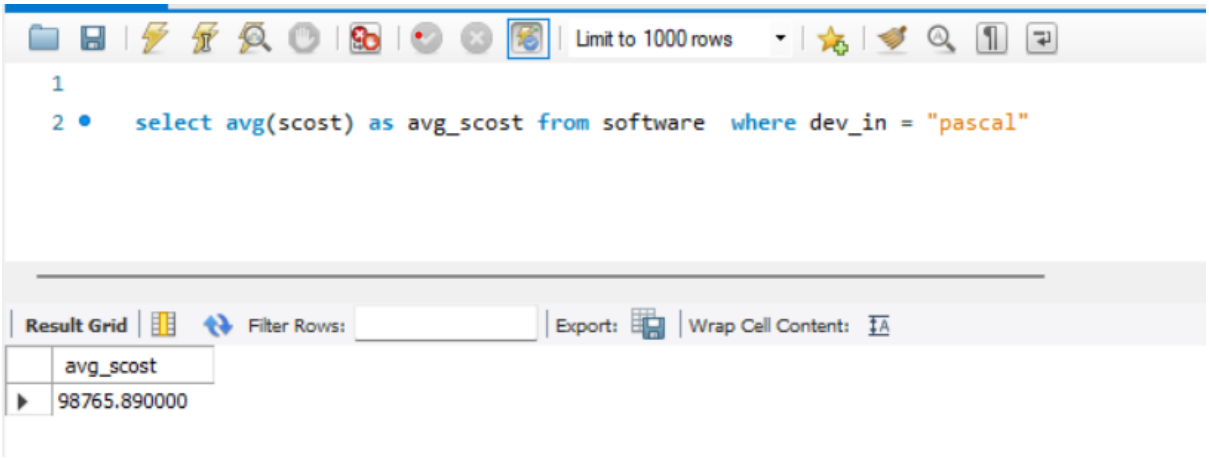
Commands:



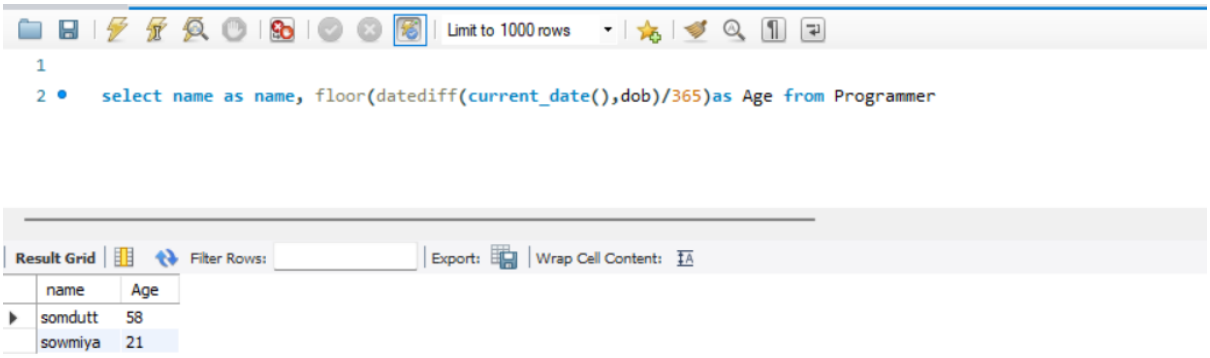
QUERIES -1

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

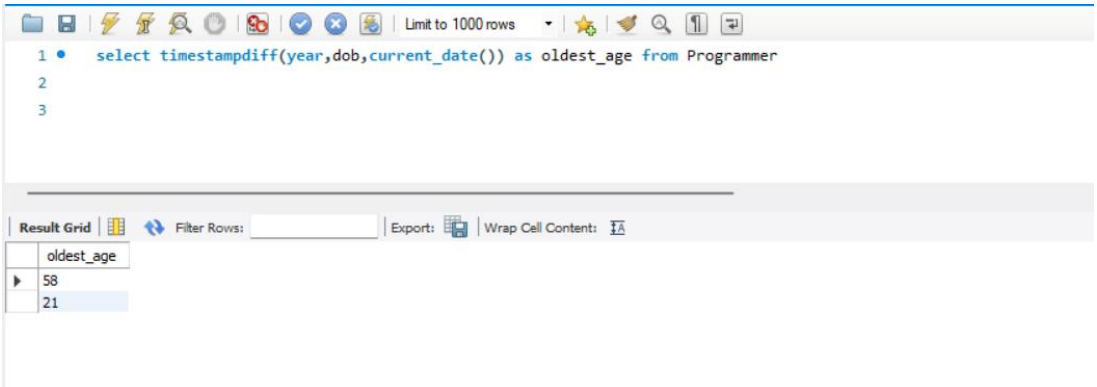
Commands:



2) Display the names and ages of all programmers.

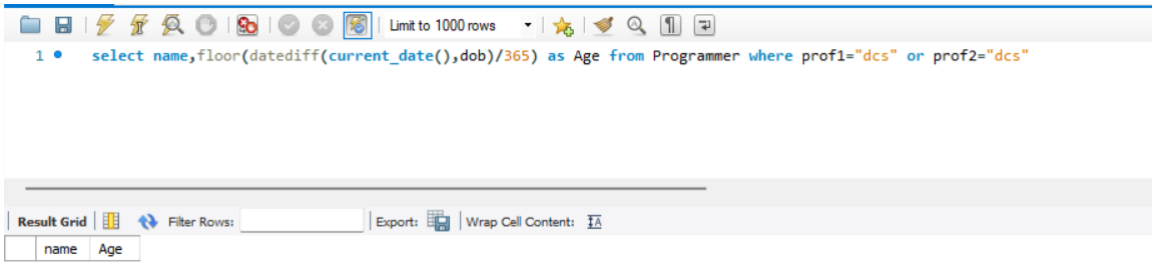


Method 2:



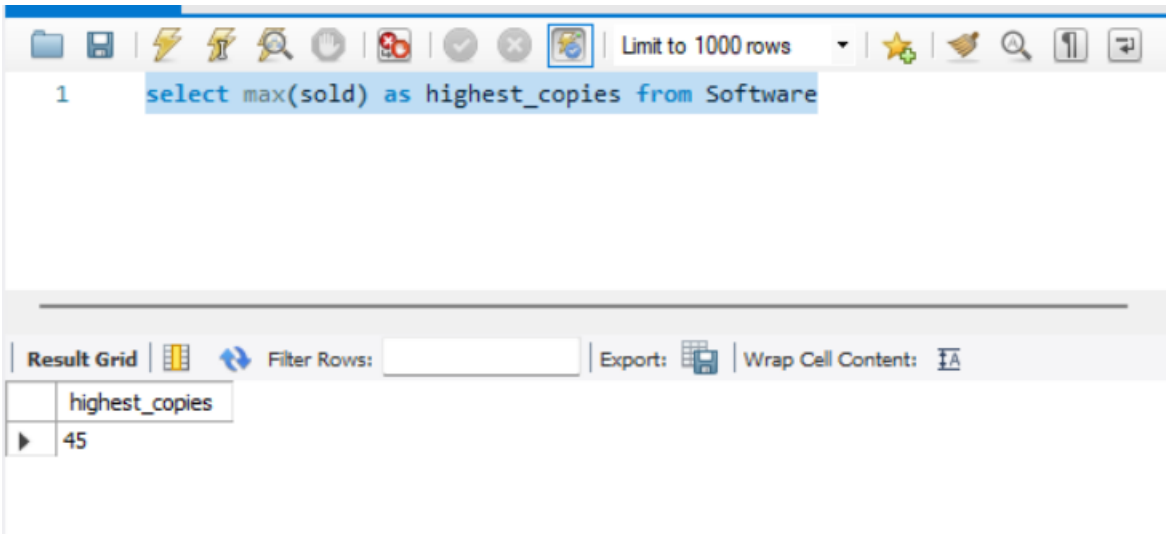
3) Display the names and ages of all the programmers who have undergone training in DCS course

Commands:



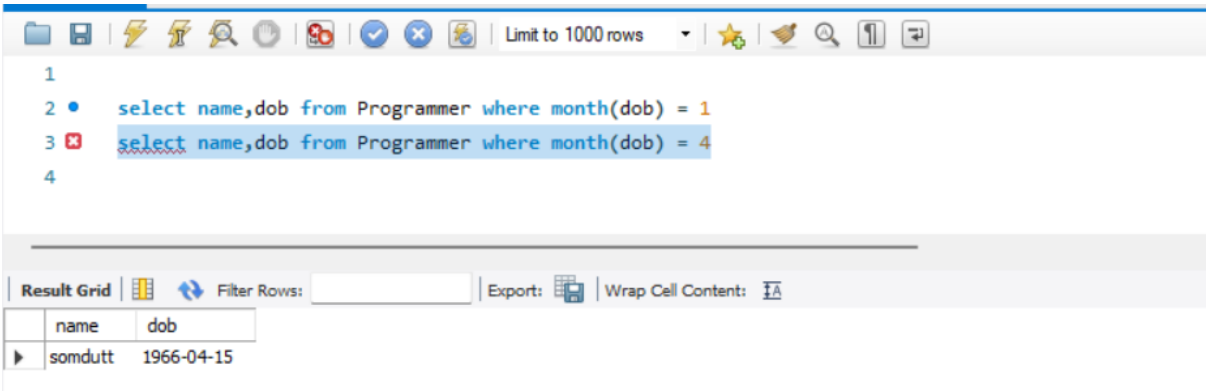
4) What is the highest numbers of copies sold by a package?

Commands:



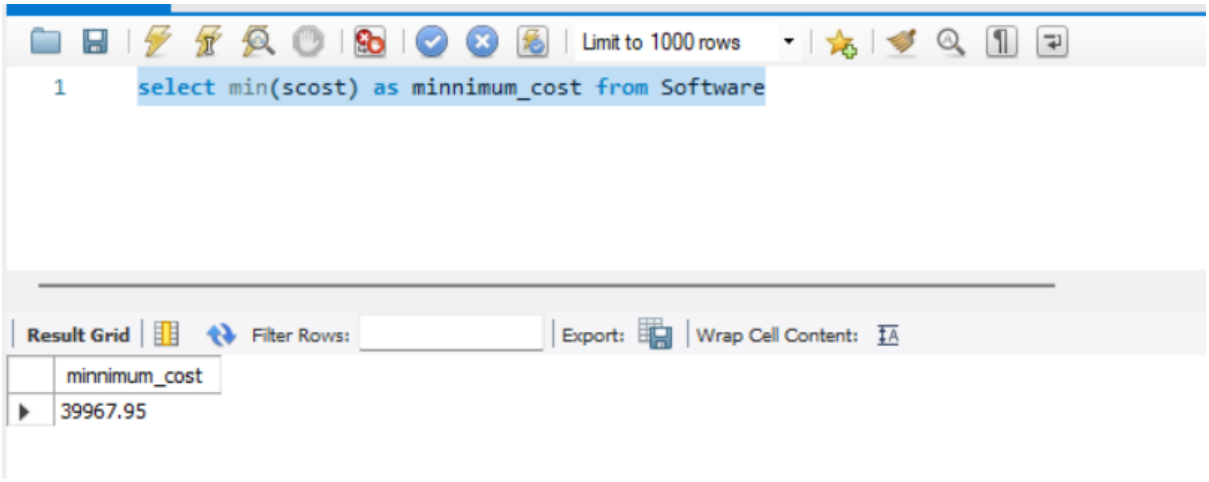
5) Display the names and date of birth of all the programmer born in JANUARY

Commands:



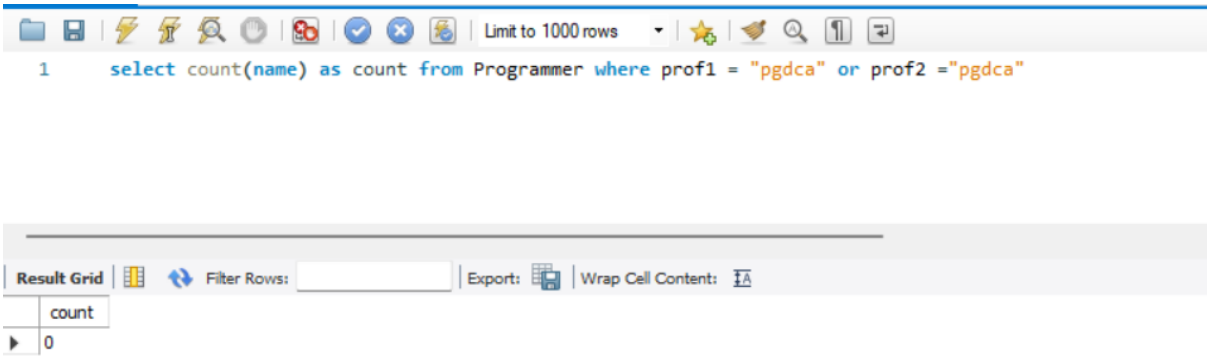
6) Display lowest course fee.

Commands:



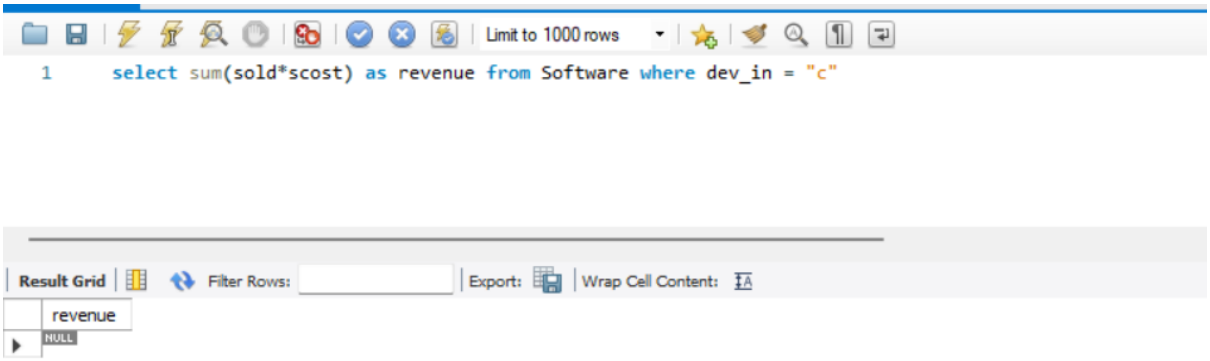
7) How many programmer has done PGDCA course

Commands:



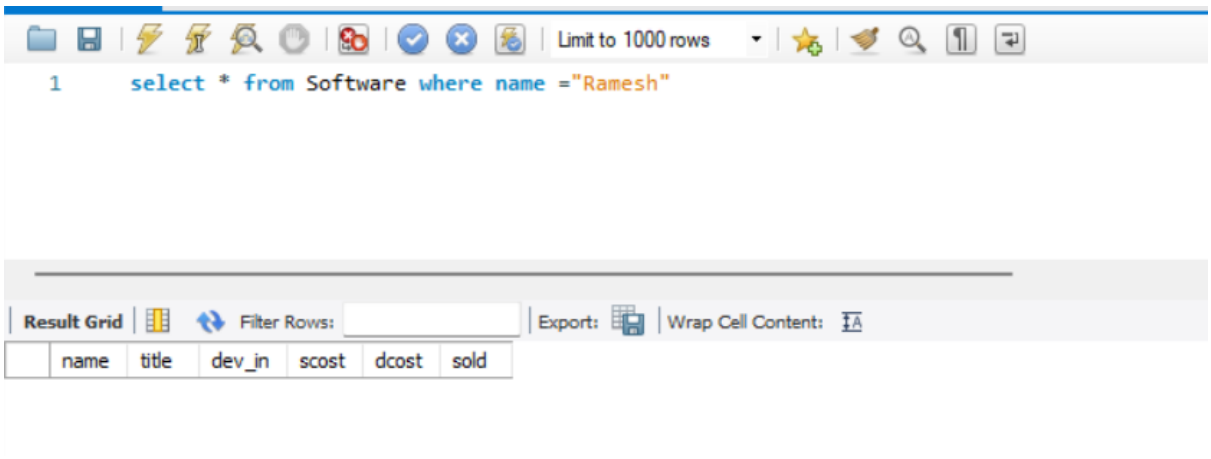
8) How much revenue has been earned through sales of packages in C.

Commands:



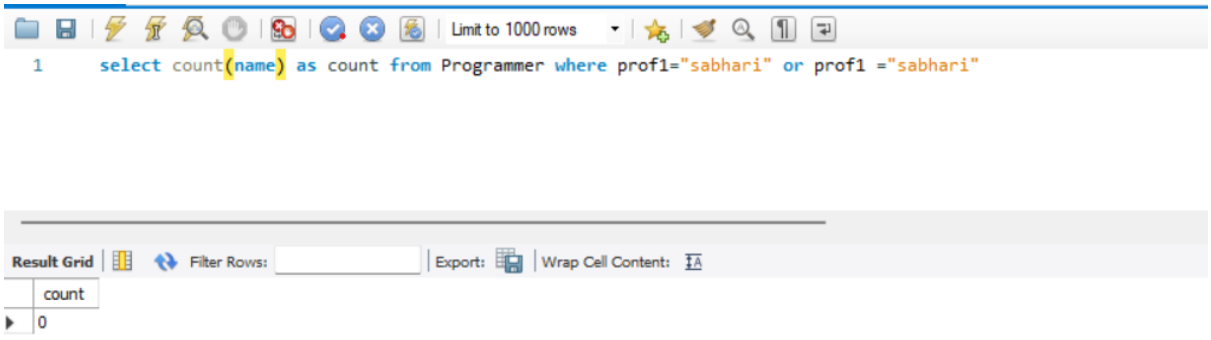
9) Display the details of software developed by Ramesh?

Commands:



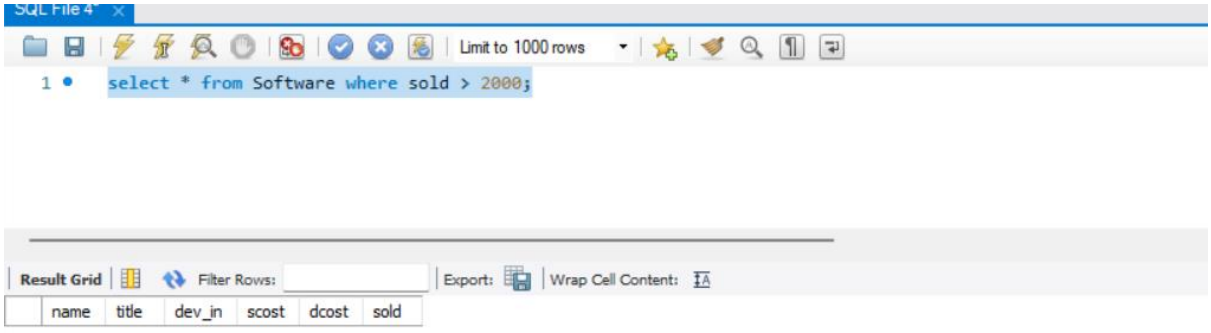
10) How many programmers studied at SABHARI

Commands:



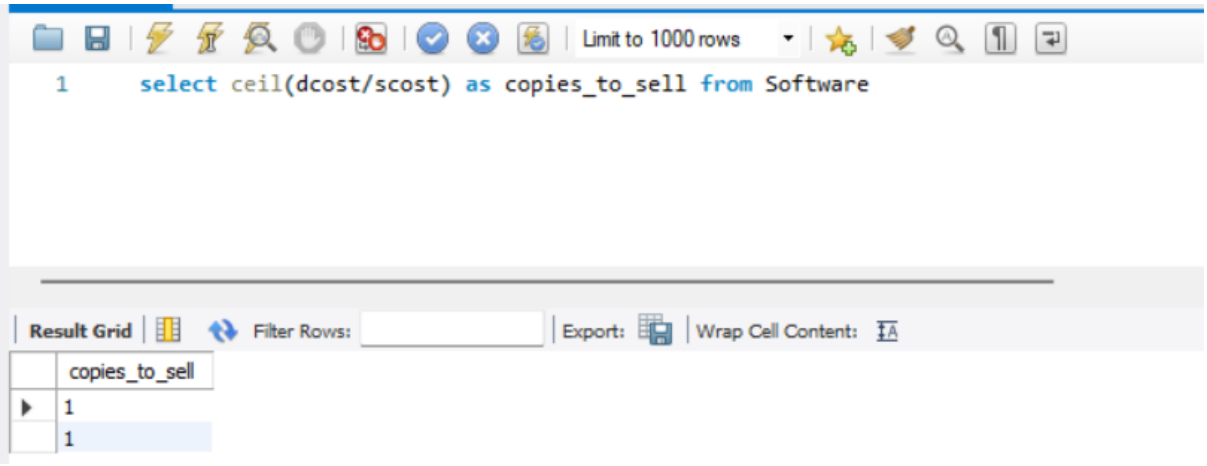
11) Display the details of PACKAGES whose sales crossed the 20000 mark

Commands:



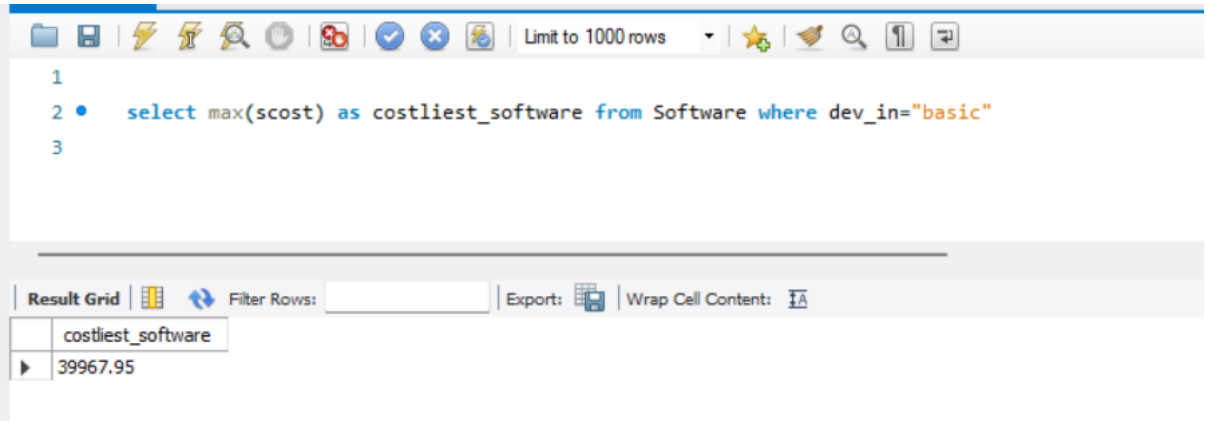
12) Find out the number of copies which should be sold in order to recover the development cost of each package.

Commands:

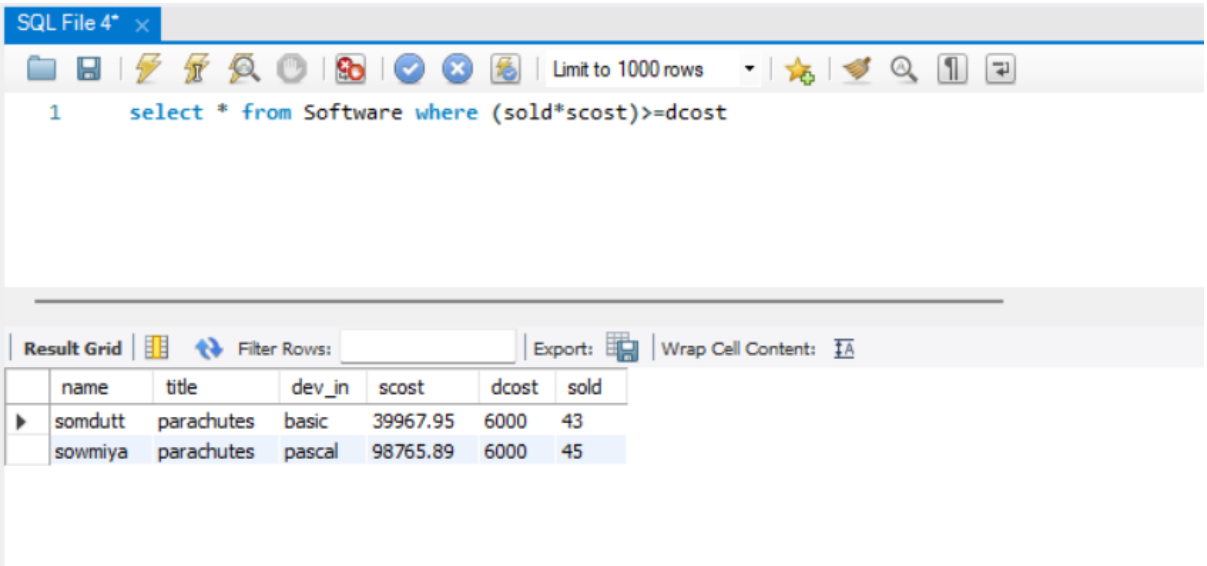


13) What is the price of the costliest software developed in BASIC

Commands:

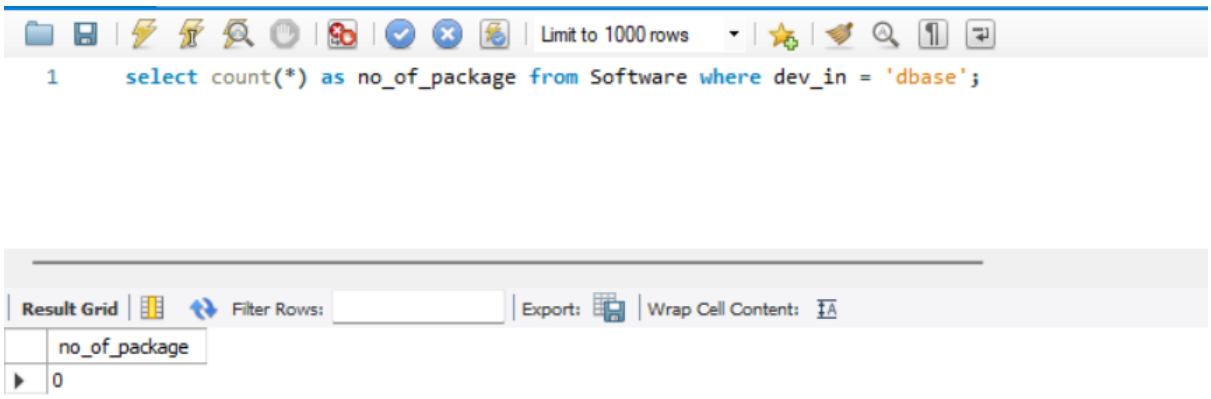


14) Display the details of packages for which development cost has been recovered.



15) How many packages were developed in dbase?

Commands:



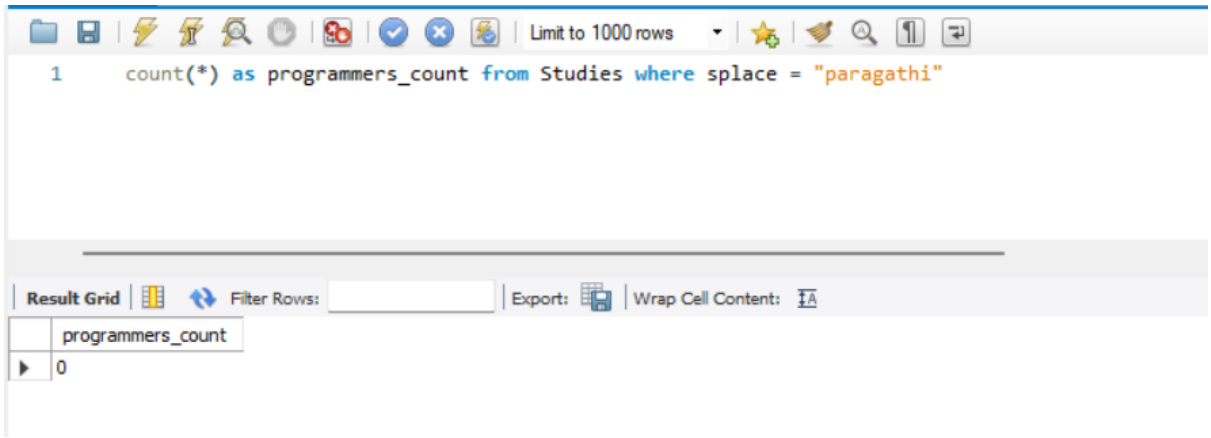
```
select count(*) as no_of_package from Software where dev_in = 'dbase';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

no_of_package
0

16) How many programmers studies at paragathi?

Commands:



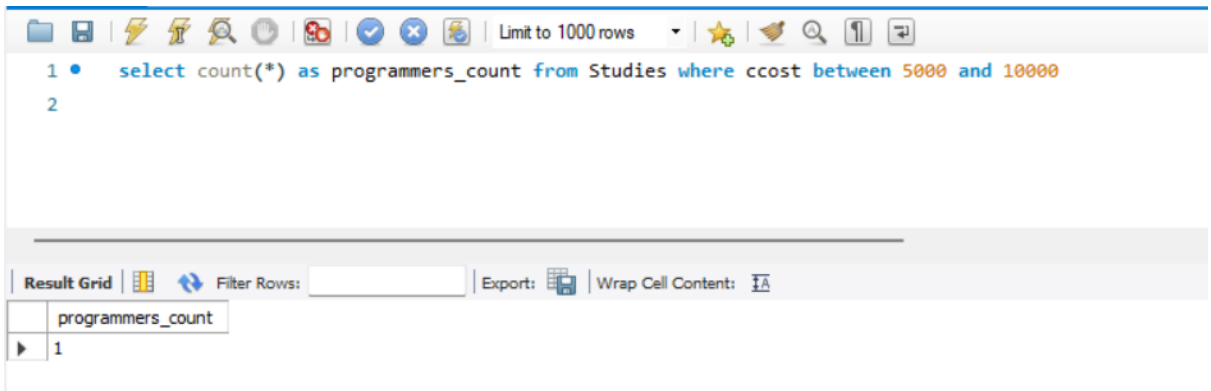
```
count(*) as programmers_count from Studies where splace = "paragathi"
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

programmers_count
0

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

Commands:



```
select count(*) as programmers_count from Studies where ccost between 5000 and 10000
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

programmers_count
1

18) What is the average course fee?

Commands:

```
select avg(ccost) as avg_cost from Studies
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

avg_cost
4750

19) Display the details of programmers knowing c?

Commands:

```
select * from Programmer where prof1="c" or prof2="c"
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name	dob	doj	sex	prof1	prof2	salary
sowmiya	2002-08-29	2023-04-08	f	c	c++	40000

20) How many programmers know either Cobol or Pascal?

Commands:

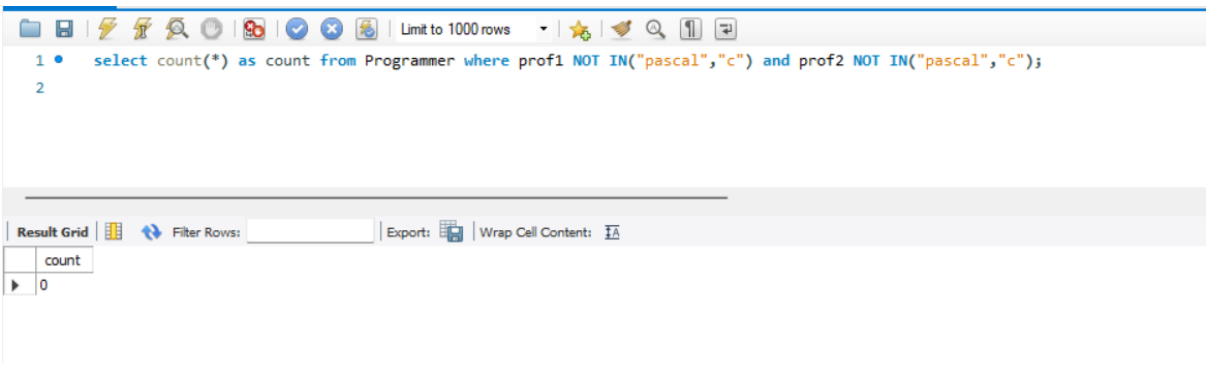
```
select count(*) as count from Programmer where prof1 IN("cobol","pascal") or prof2 IN ("cobol","pascal")
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

count
1

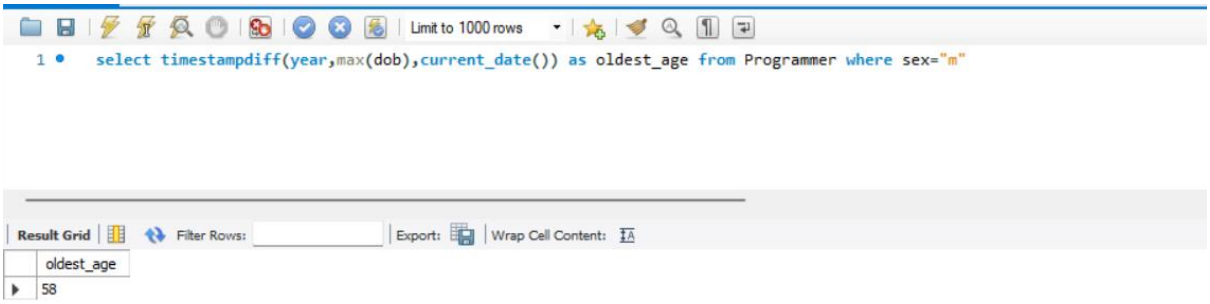
21) How many programmers don't know Pascal & C

Commands:



22) How old is the oldest male programmers?

Commands:

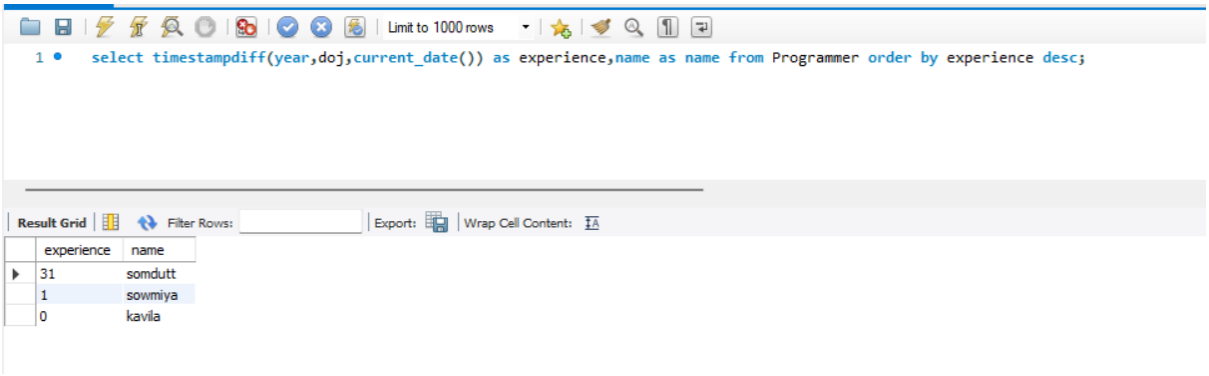


23) What is the average age of female programmers?

Commands:

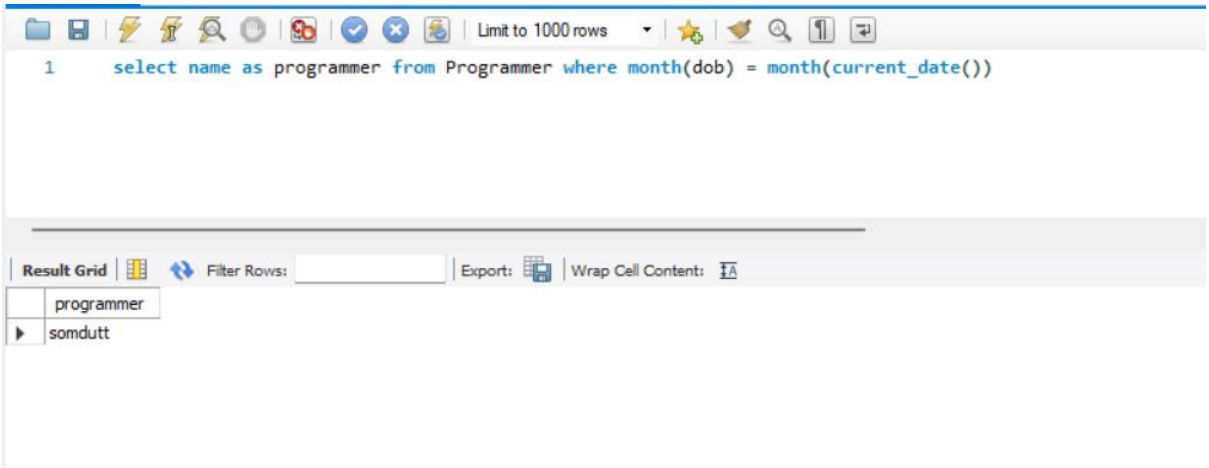
24) Calculate the experience in years for each programmers and display along with the names in descending order?

Commands:



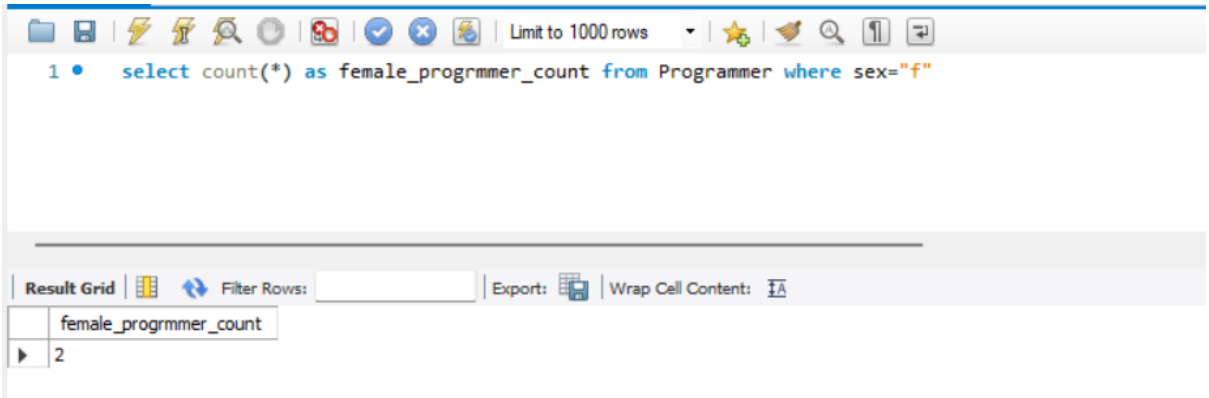
25) Who are the programmers who celebrate their birthday during the current month?

Commands:



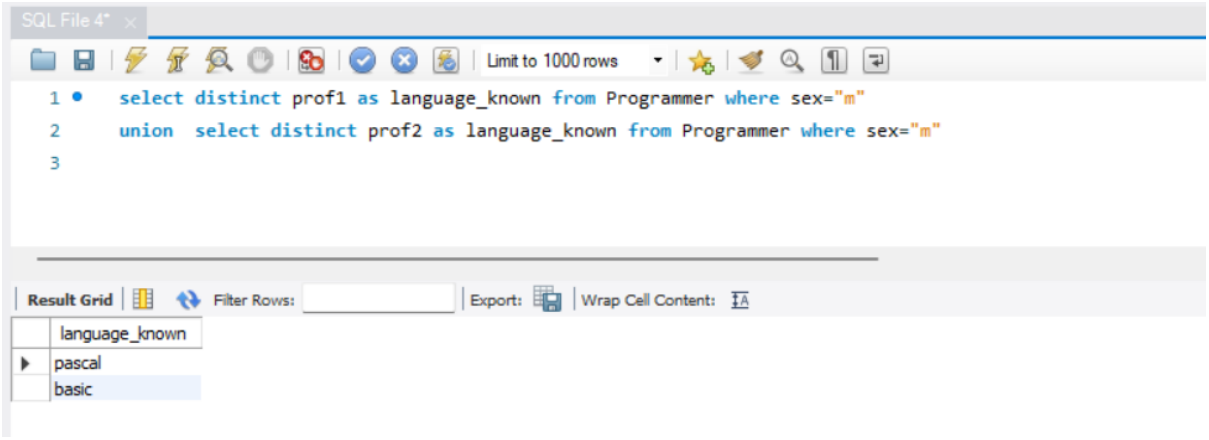
26) How many female programmers are there?

Commands:



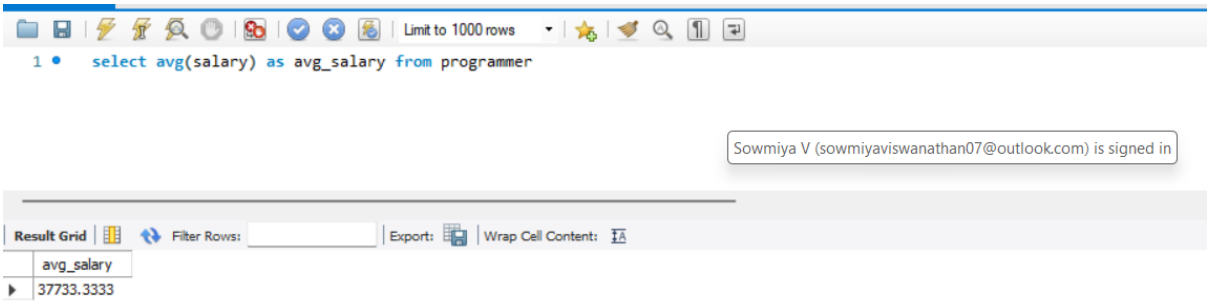
27) What are the languages known by the male programmers?

Commands:



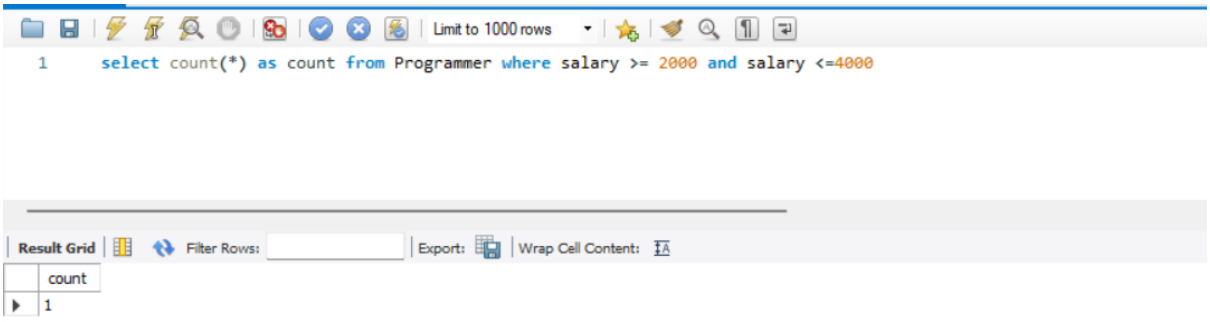
28) What is the Average salary?

Commands:



29) How many people draw 2000 to 4000

Commands:



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

Commands:

```
select * from Programmer where prof1 NOT IN ("clipper","cobol","pascal") and prof2 NOT IN ("clipper","cobol","pascal");
```

name	dob	doj	sex	prof1	prof2	salary
sowmiya	2002-08-29	2023-04-08	f	c	c++	40000
kavila	2003-11-27	2024-01-26	f	c	c++	70000

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

Commands:

```
select count(*) as female_programmer from Programmer where sex="f" and (prof1="c" or prof2="c") and timestampdiff(year,dob,current_date())>24;
```

female_programmer
0

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

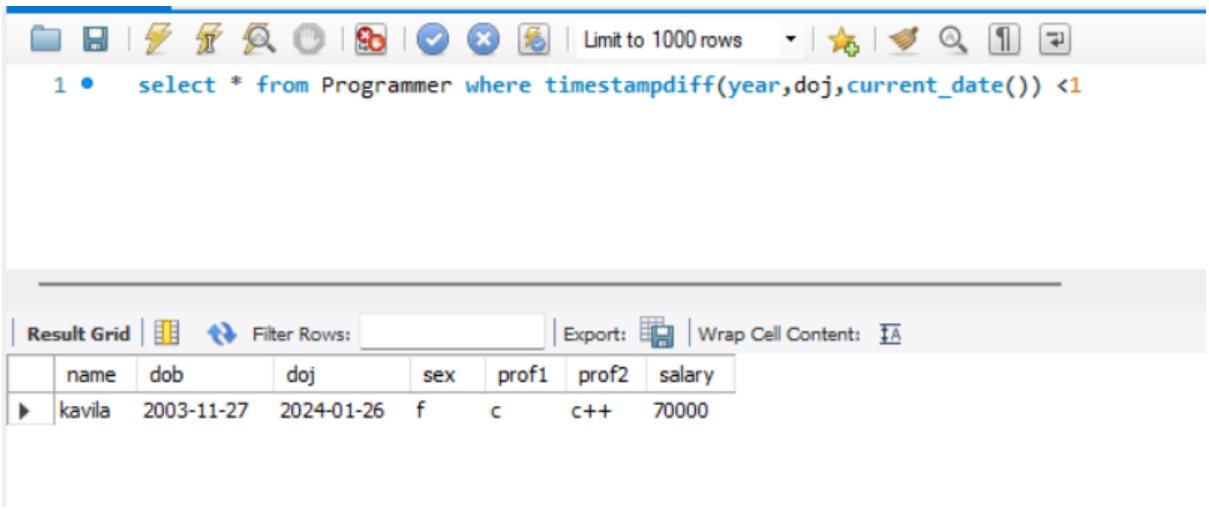
Commands:

```
insert into Programmer values("sowmiyav","2000-04-21","2020-04-21","f","c","c++","6000");
select name as programmer_name  from Programmer where date_format(dob,"%m-%d") between date_format(current_date(),"%m-%d")
    and date_format(date_add(current_date(),interval 7 day),"%m-%d");
```

programmer_name
sowmiyav

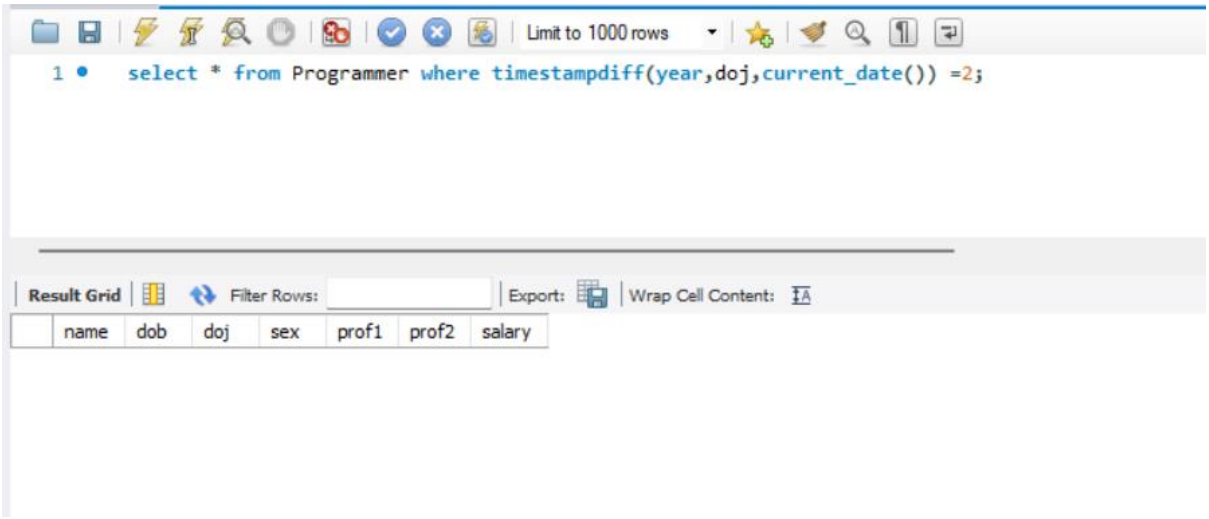
33) Display the details of those with less than a year's experience?

Commands:



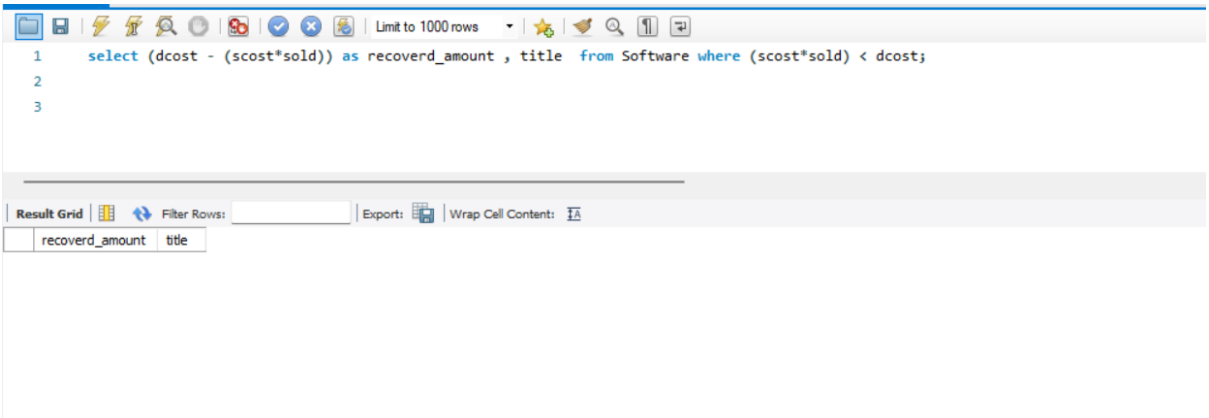
34) Display the details of those who will be completing 2 years of service this year?

Commands:



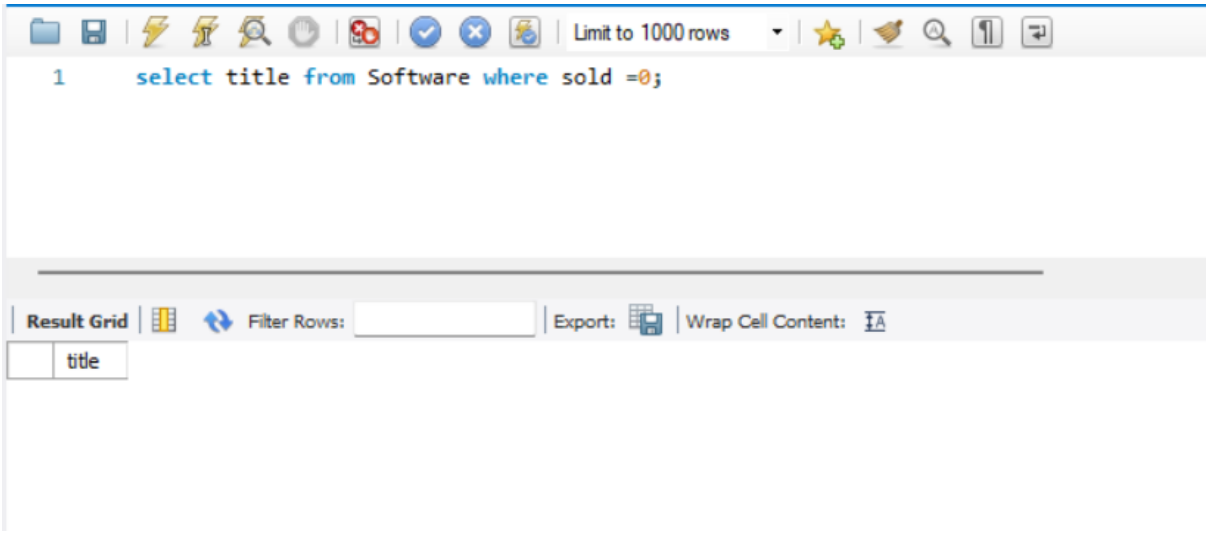
35) Calculate the amount to be recovered for those packages whose development cost has not been recovered?

Commands:



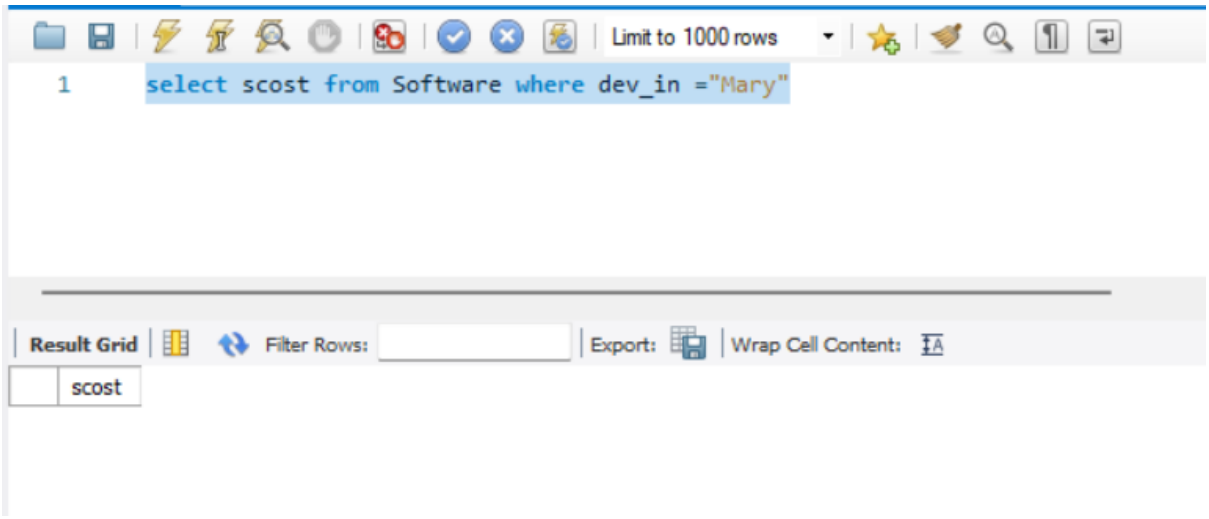
36) List the packages which have not been sold so far?

Commands:



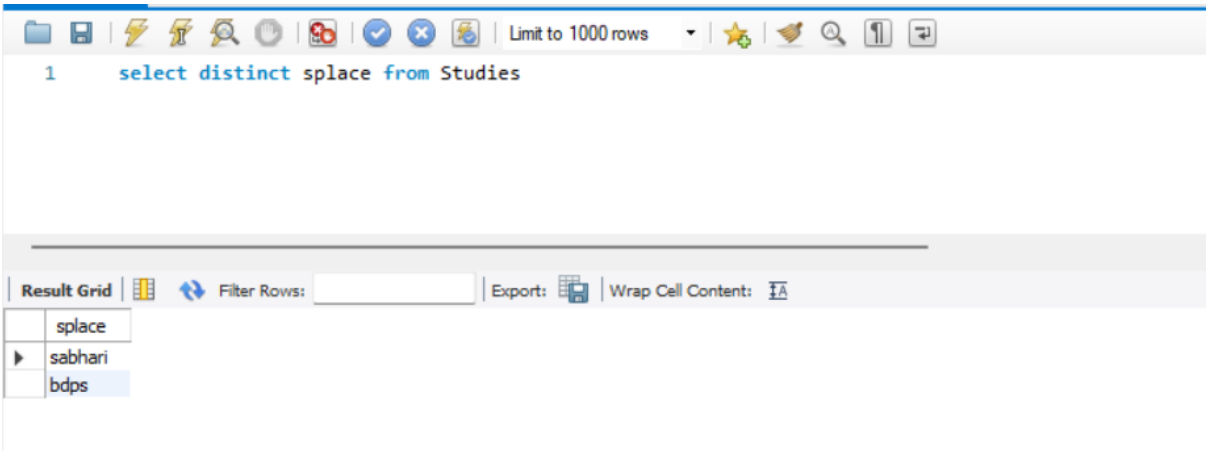
37) Find out the cost of the software developed by Mary

Commands:



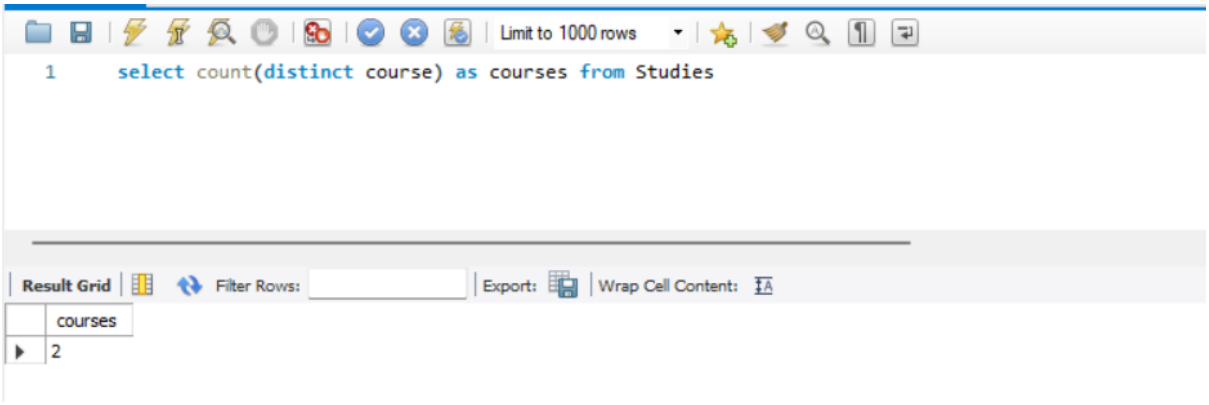
38) Display the institute's names from the studies table without duplicates?

Commands:



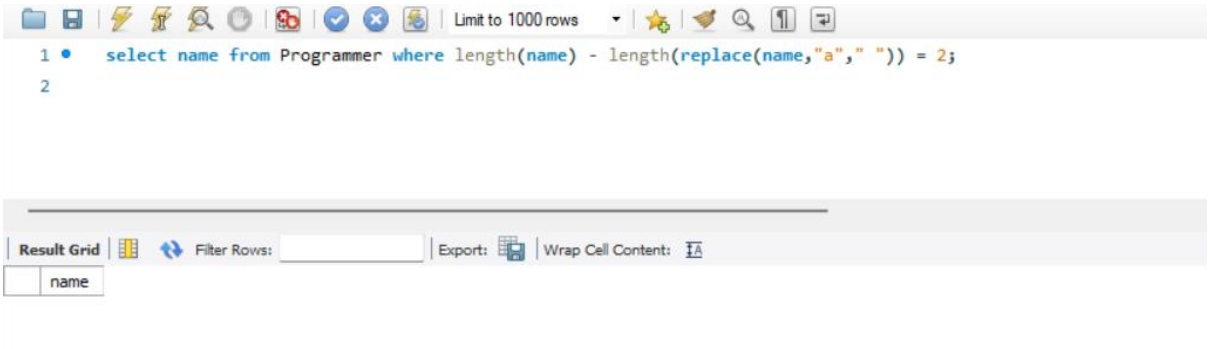
39) How many different courses are mentioned in the studies table?

Commands:



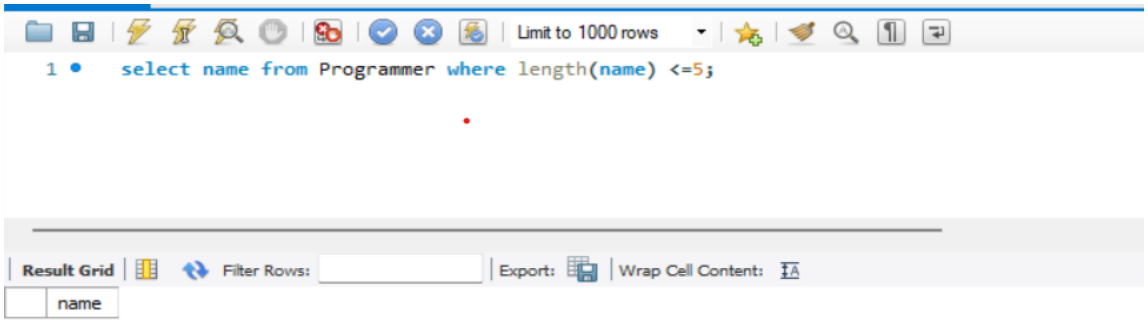
40) Display the names of the programmers whose names contain 2 occurrences of the letter A

Commands:



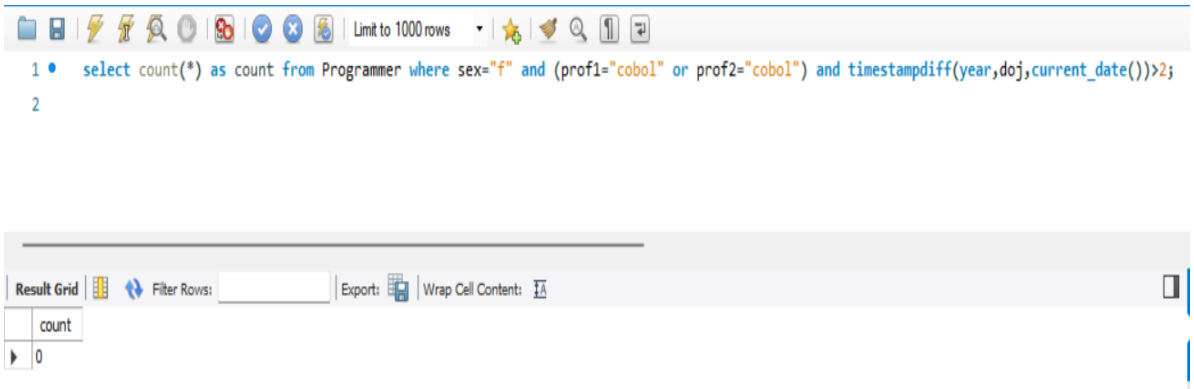
41) Display the names of programmers whose names contain unto 5 characters?

Commands:



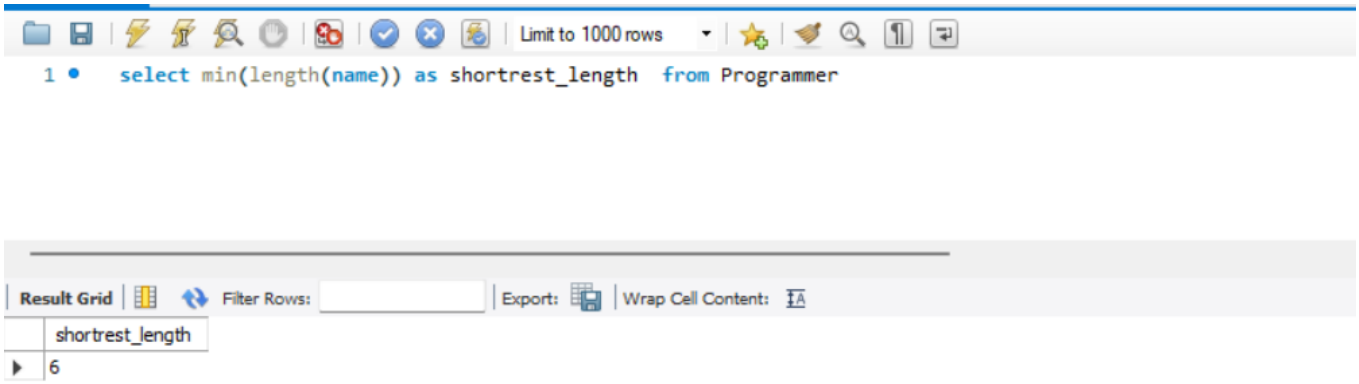
42) How many female programmers knowing COBOL have more than 2 years experience?

Commands:



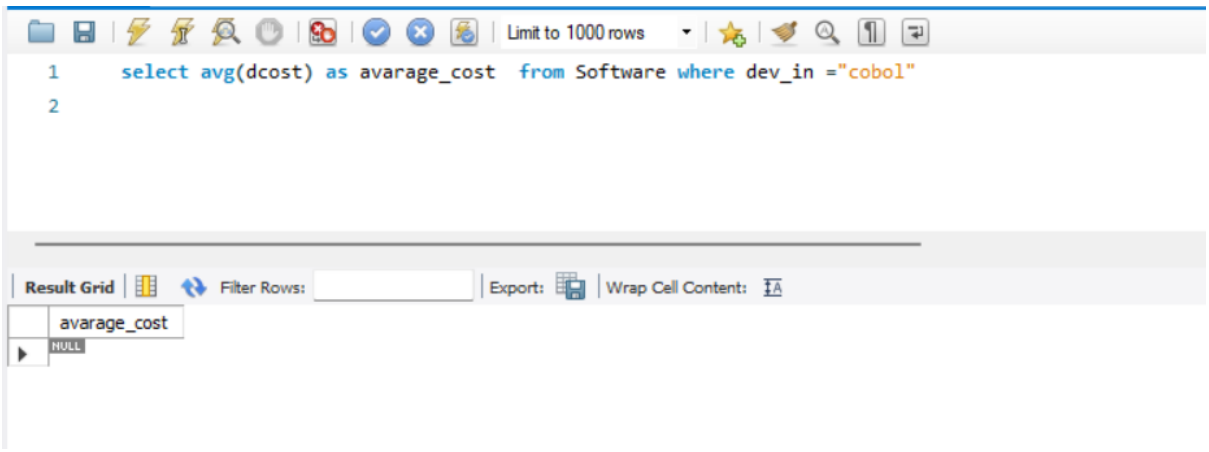
43) What is the length of the shortest name in the programmer table?

Commands:



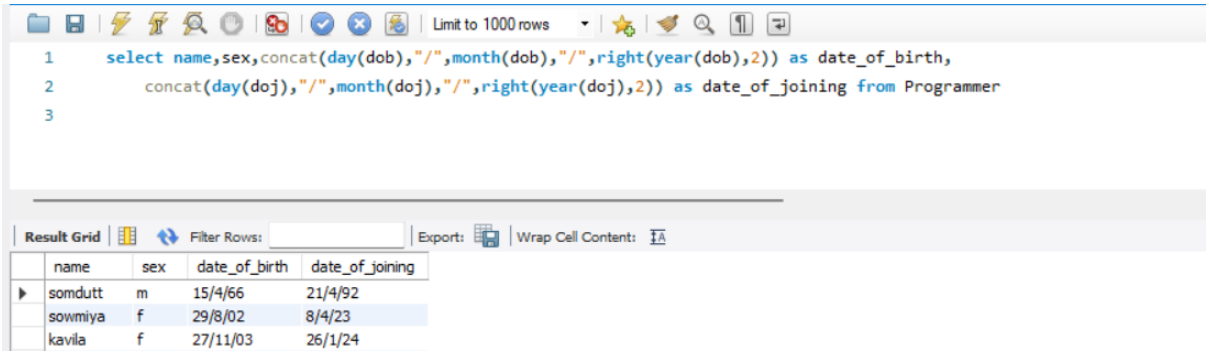
44) What is the average development cost of a package developed in COBOL

Commands:



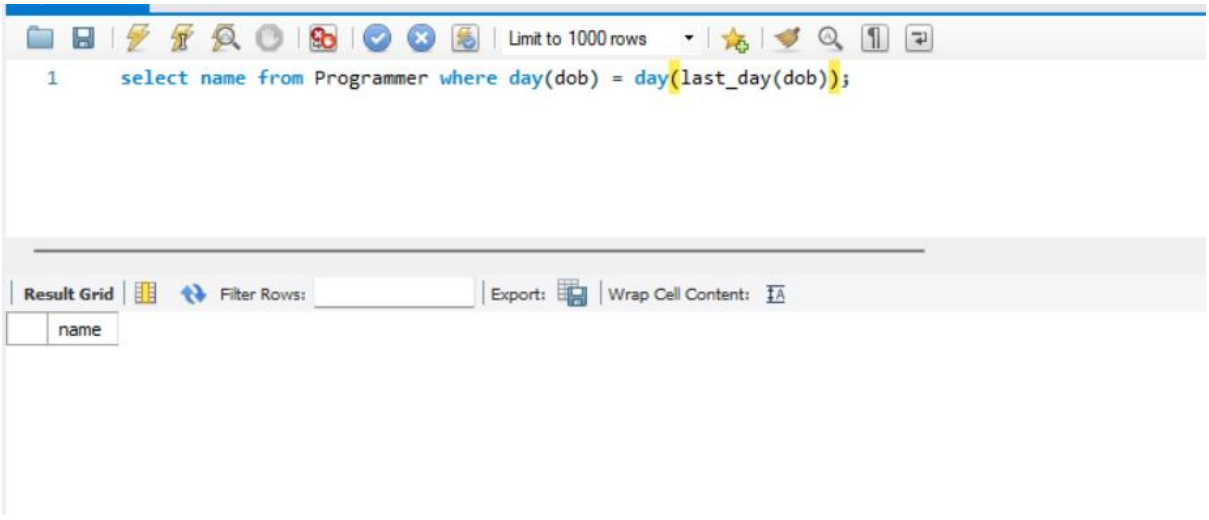
45) Display the name, sex, dob (DD/MM/YY format), doj for all the programmers without using conversion function?

Commands:



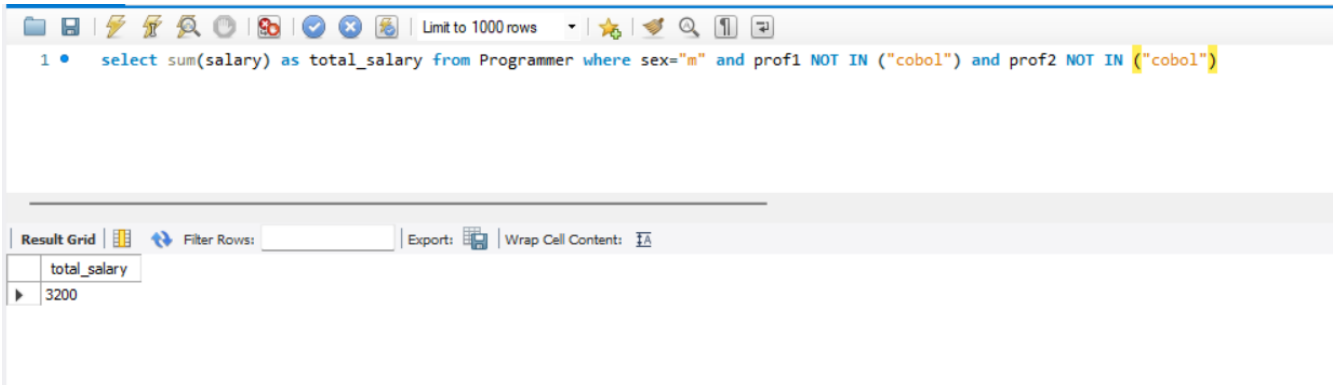
46) Who are the programmers who were born on the last day of the month?

Commands:



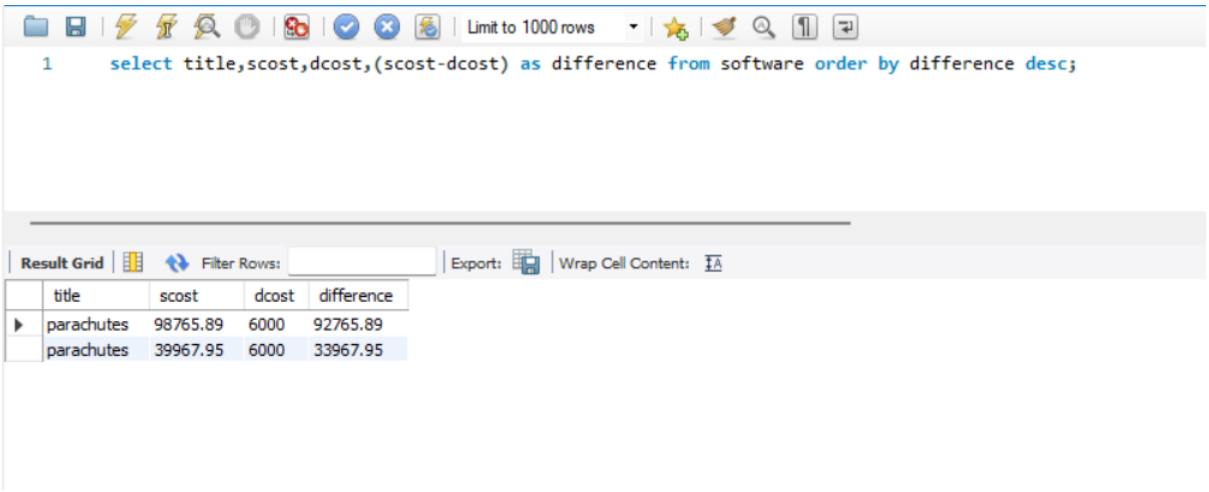
47) What is the amount paid in salaries of the male programmers who do not know Cobol?

Commands:



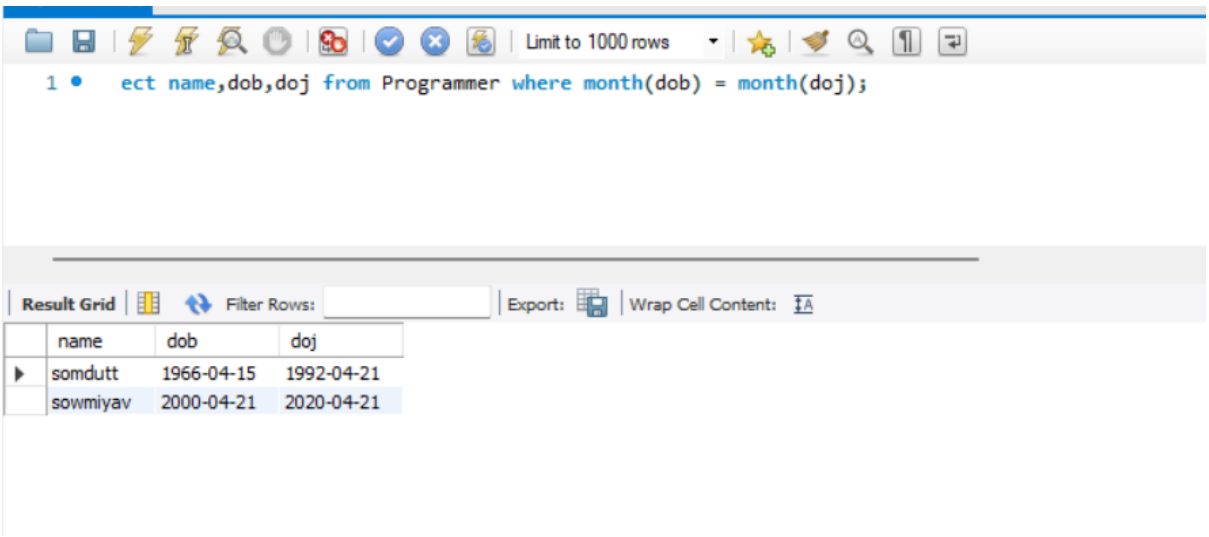
48) Display the title, scost, dcost and difference between scost and dcost in descending order of difference

Commands:



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

Commands:



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

Commands:

```
select title from Software where title like "% %";
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

title

QUERIES - II

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

Commands:

```
select dev_in as language , count(*) as count from software
    group by dev_in;
```

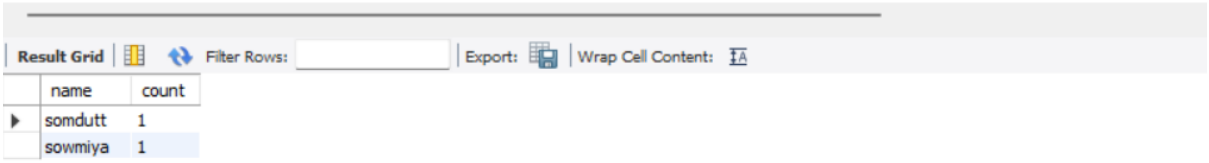
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

language	count
basic	1
pascal	1

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

Comman

```
select name as name,count(*) as count from software
    group by name;
```

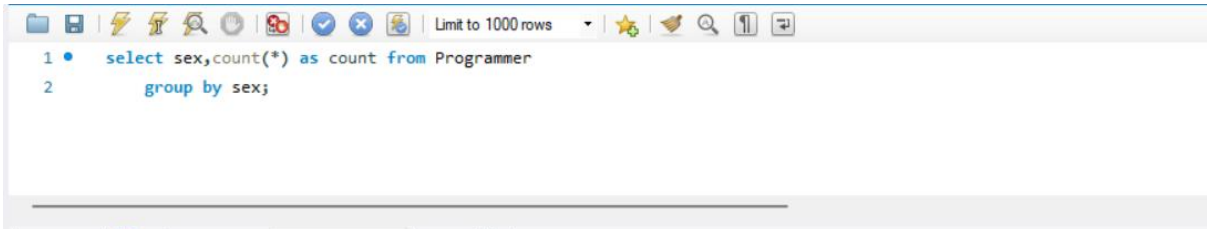


name	count
somdutt	1
sowmiya	1

3) Display THE NUMBER OF male and female programmer.

Commands:

```
select sex,count(*) as count from Programmer
    group by sex;
```

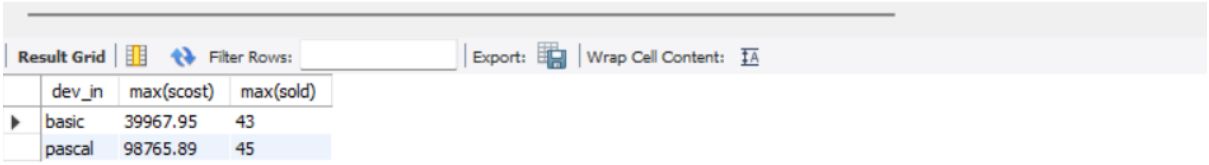


sex	count
m	1
f	3

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

Commands:

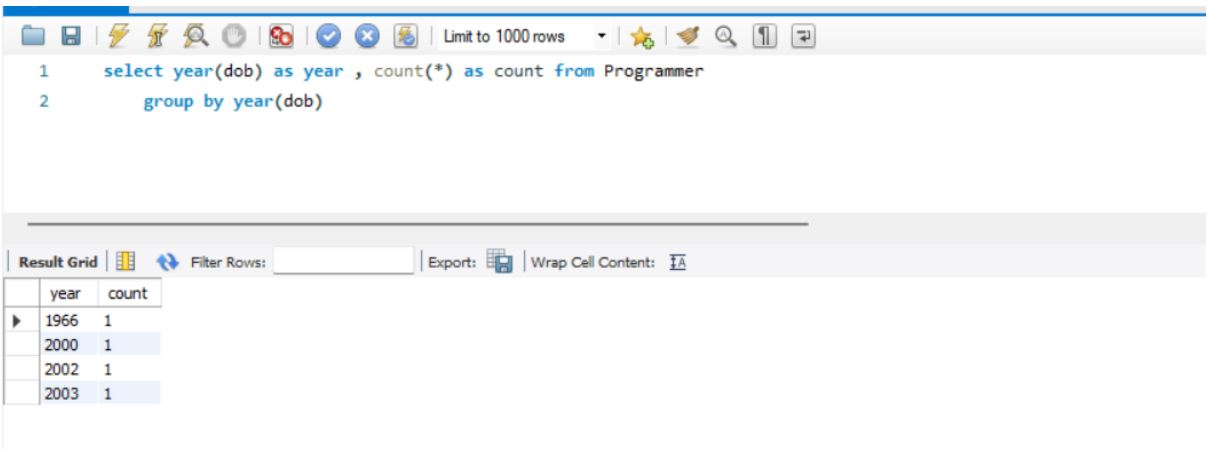
```
select dev_in , max(scost),max(sold) from Software group by dev_in;
```



dev_in	max(scost)	max(sold)
basic	39967.95	43
pascal	98765.89	45

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

Commands:



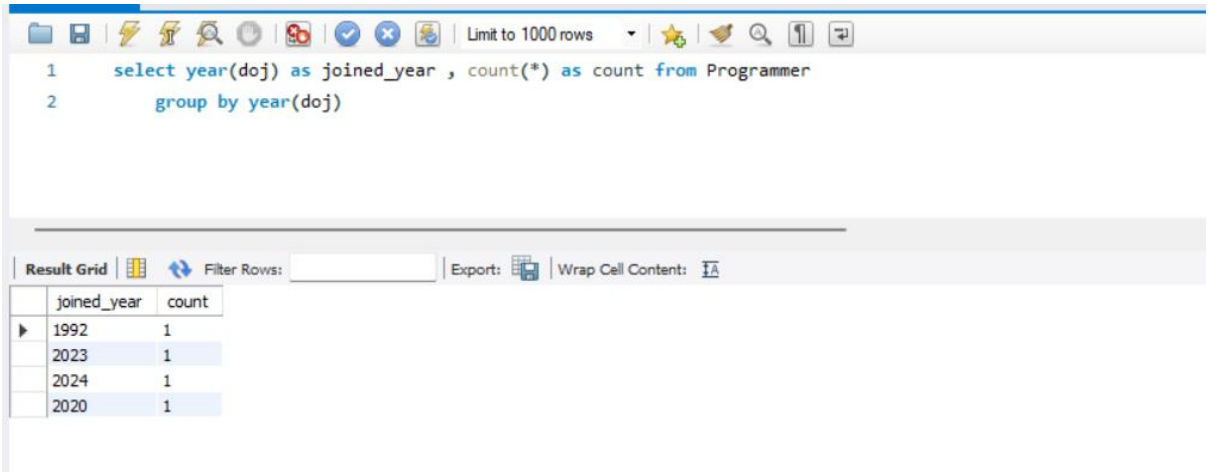
```
select year(dob) as year , count(*) as count from Programmer
    group by year(dob)
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

year	count
1966	1
2000	1
2002	1
2003	1

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

Commands:



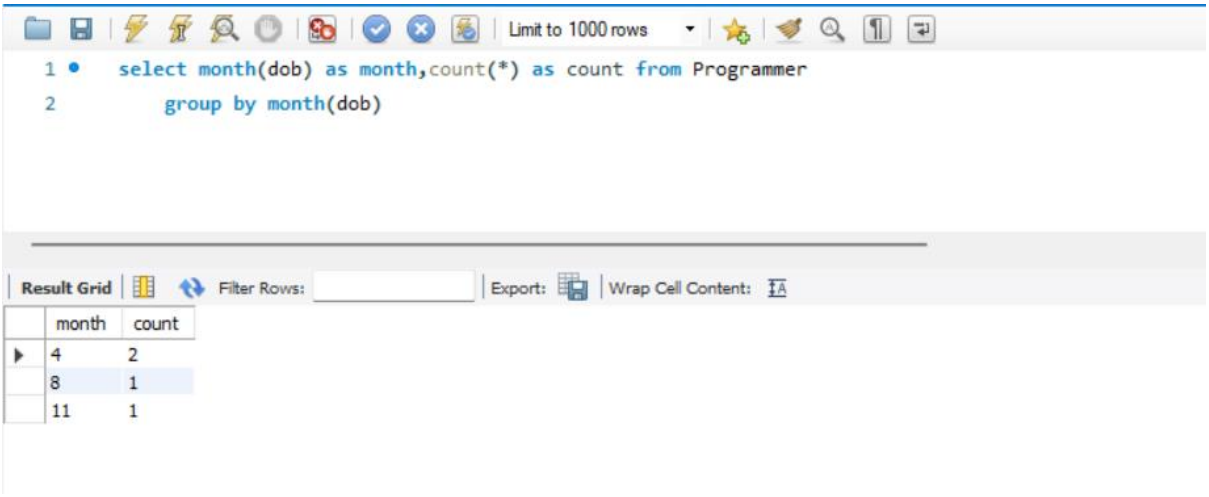
```
select year(doj) as joined_year , count(*) as count from Programmer
    group by year(doj)
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

joined_year	count
1992	1
2023	1
2024	1
2020	1

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

Commands:



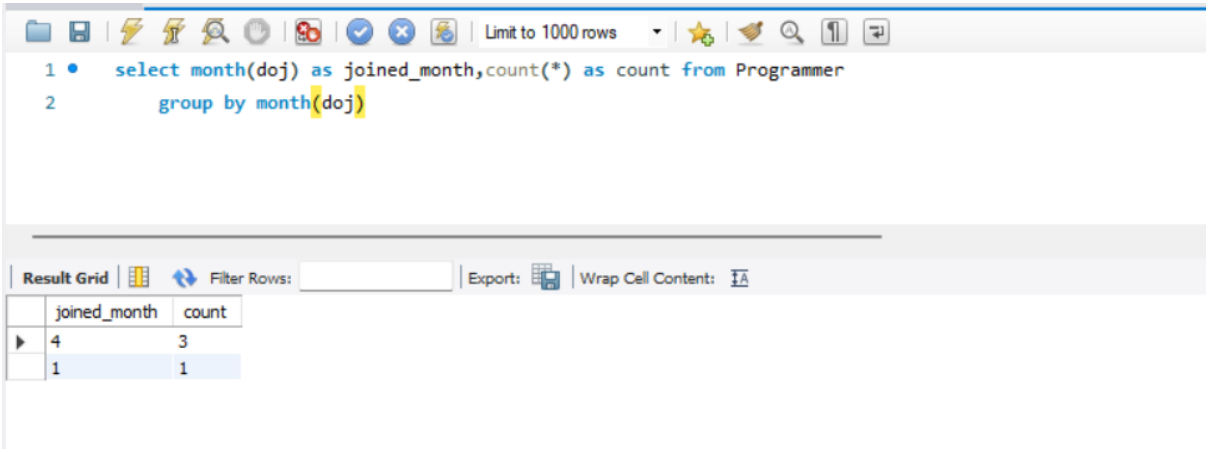
```
select month(dob) as month,count(*) as count from Programmer
    group by month(dob)
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

month	count
4	2
8	1
11	1

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

Commands:



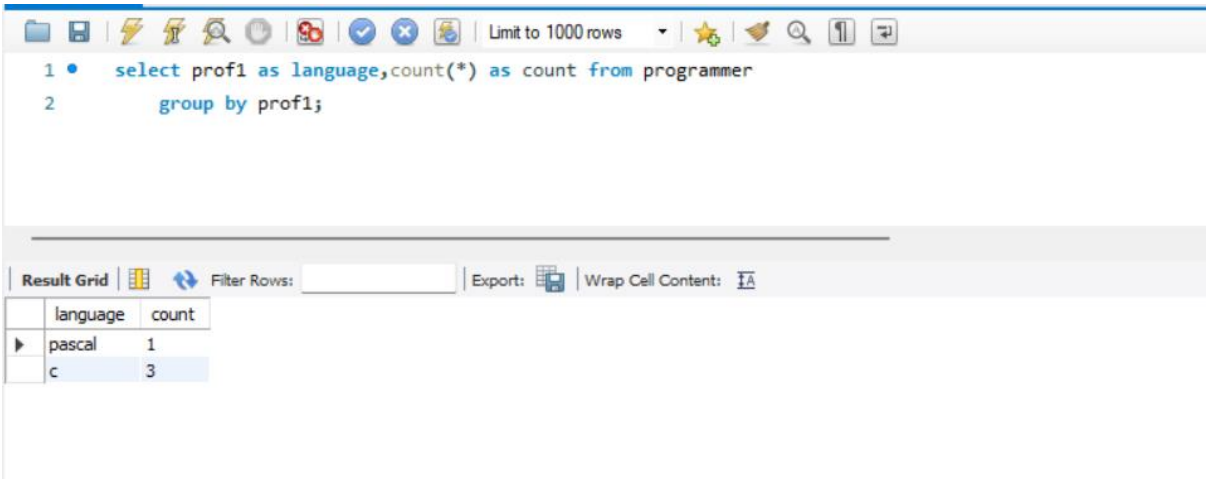
```
select month(doj) as joined_month,count(*) as count from Programmer
    group by month(doj)
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

joined_month	count
4	3
1	1

9) Display the language wise COUNTS of prof1.

Commands:



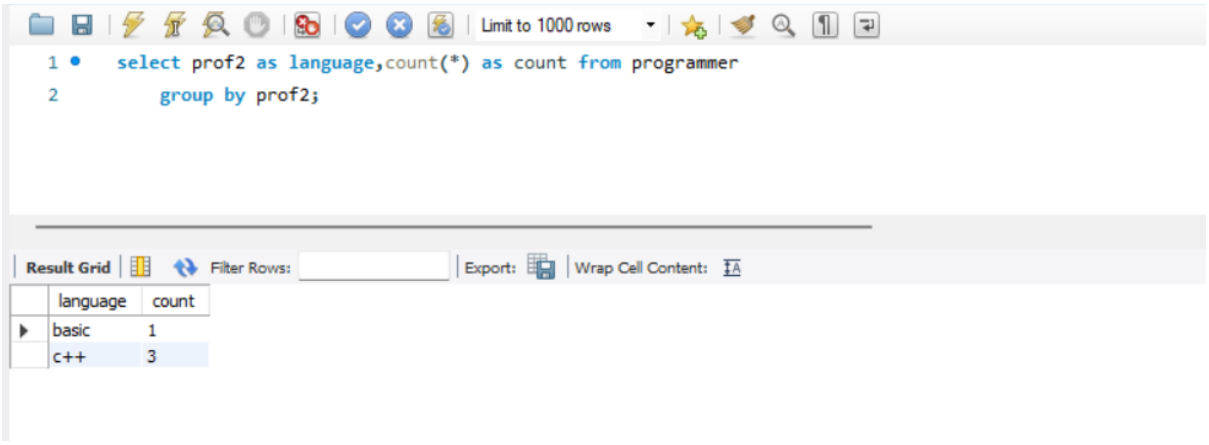
```
select prof1 as language,count(*) as count from programmer
    group by prof1;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

language	count
pascal	1
c	3

10) Display the language wise COUNTS of prof2.

Commands:



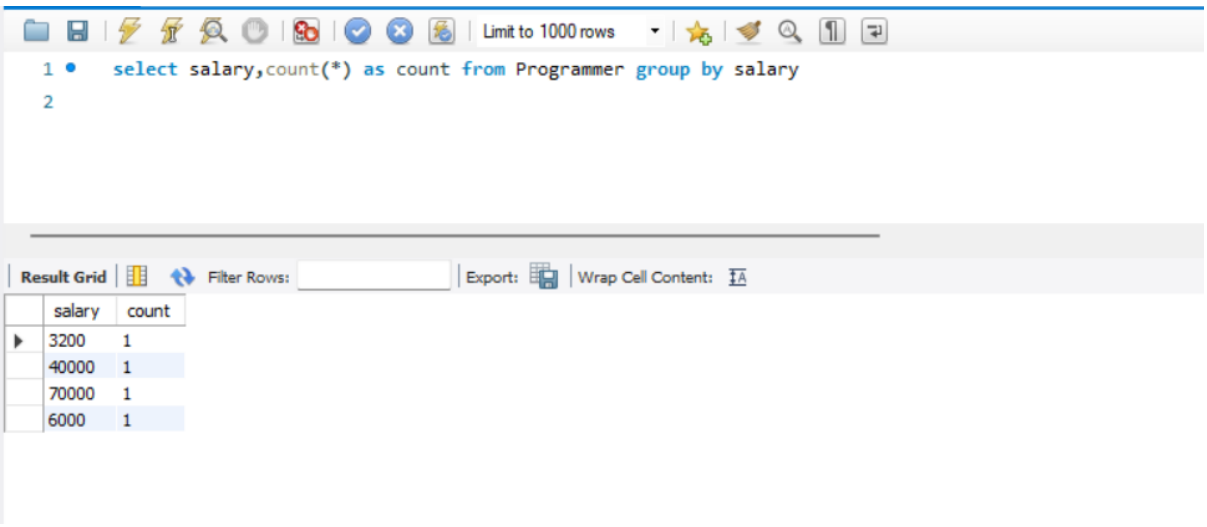
```
select prof2 as language,count(*) as count from programmer
    group by prof2;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

language	count
basic	1
c++	3

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

Commands:



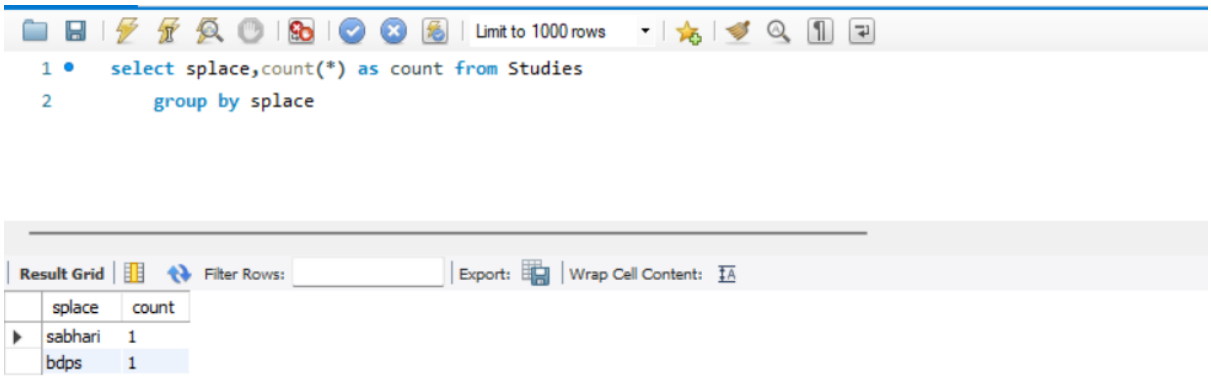
```
select salary,count(*) as count from Programmer group by salary
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

salary	count
3200	1
40000	1
70000	1
6000	1

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

Commands:



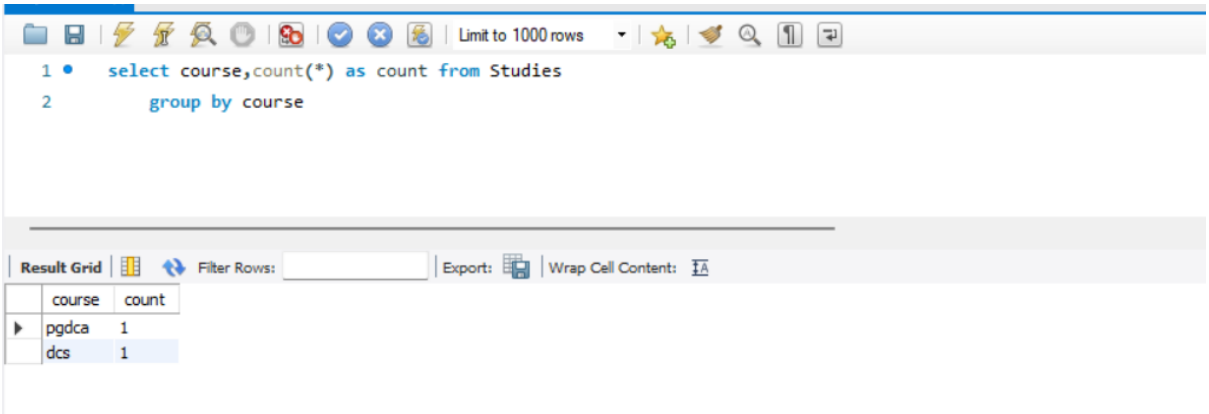
```
select splace,count(*) as count from Studies
    group by splace
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

splace	count
sabhari	1
bdps	1

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

Commands:



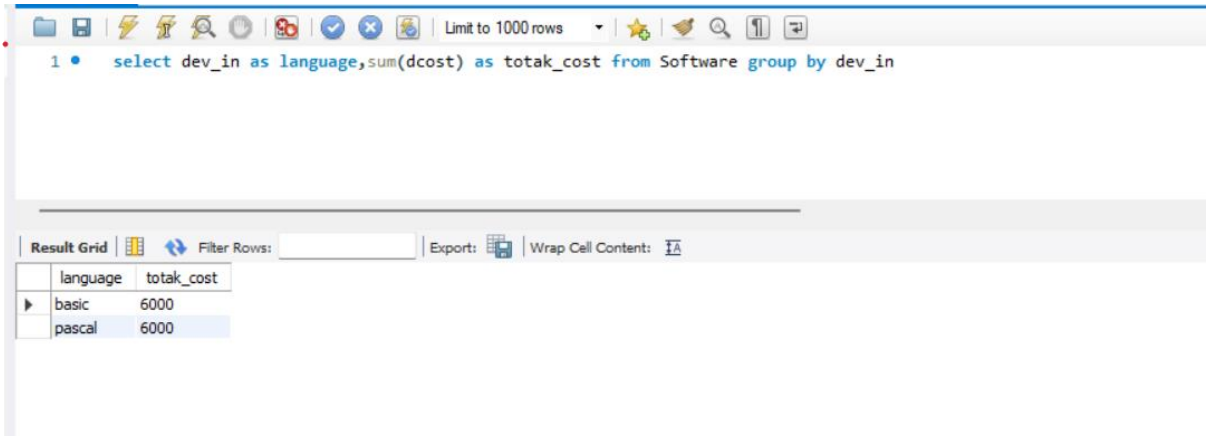
```
select course,count(*) as count from Studies
    group by course
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

course	count
pgdca	1
dcs	1

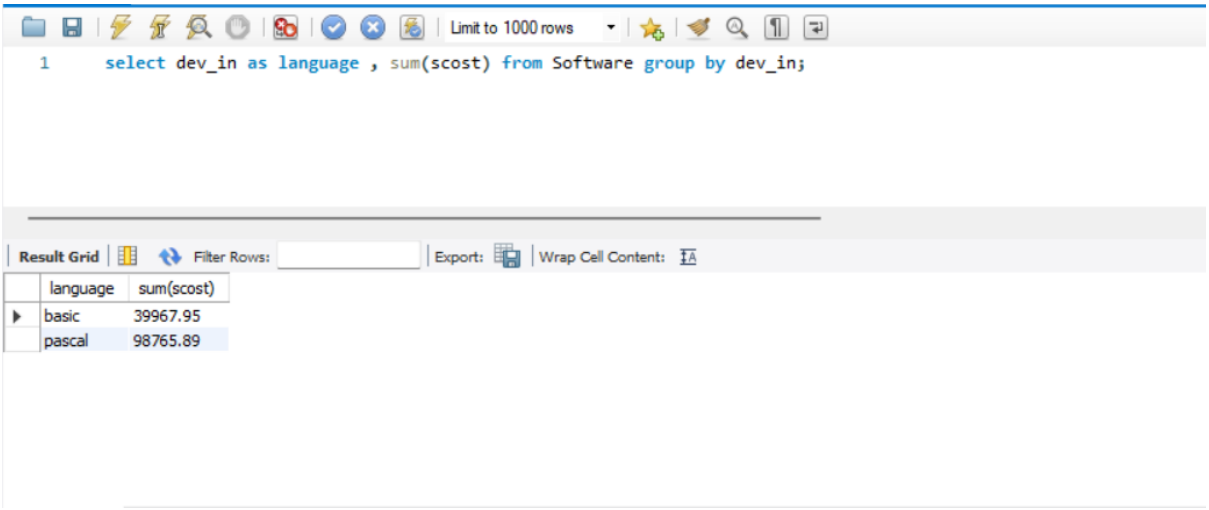
14) Display the TOTAL development COST of the packages developed in EACH language.

Commands:



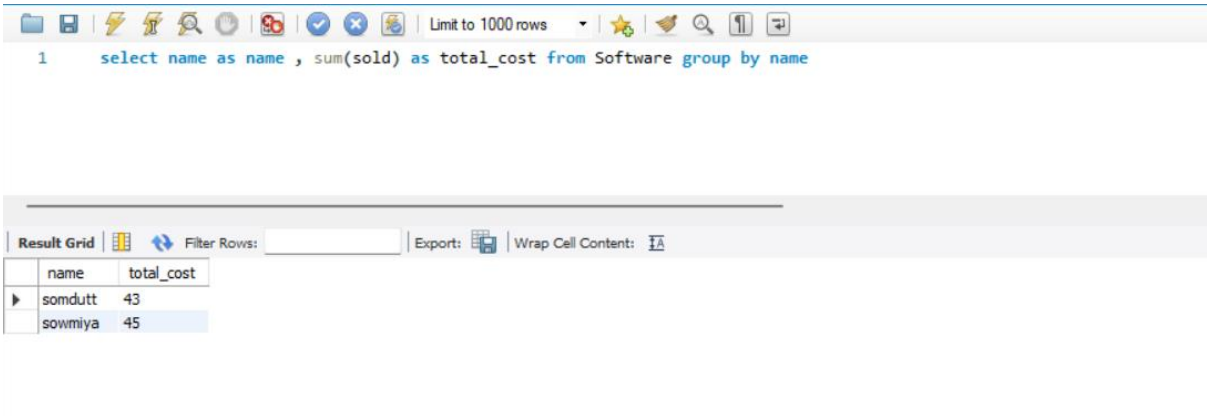
15) Display the selling cost of the package developed in EACH language.

Commands:



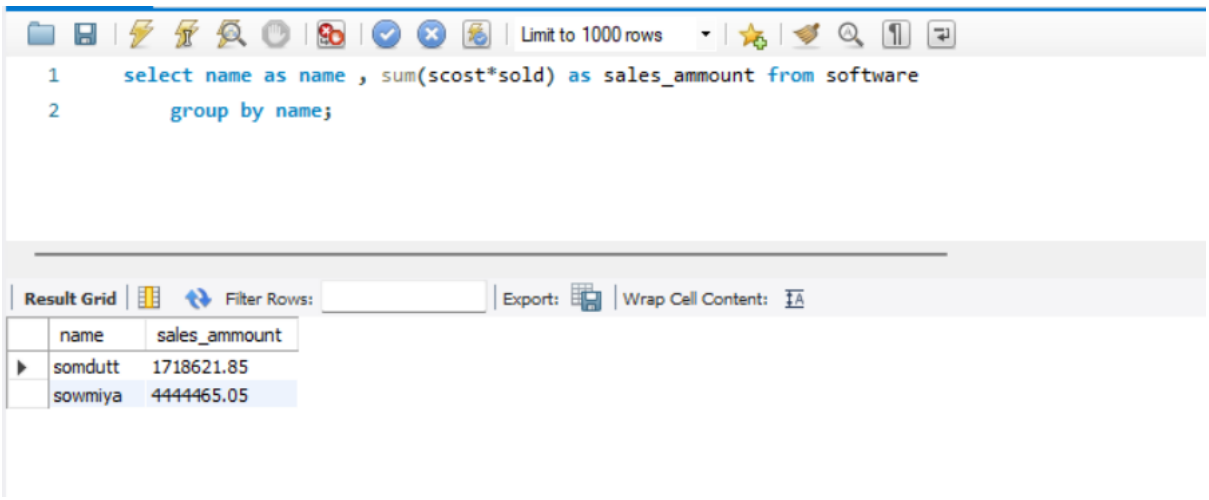
16) Display the cost of the package developed by EACH programmer.

commands:



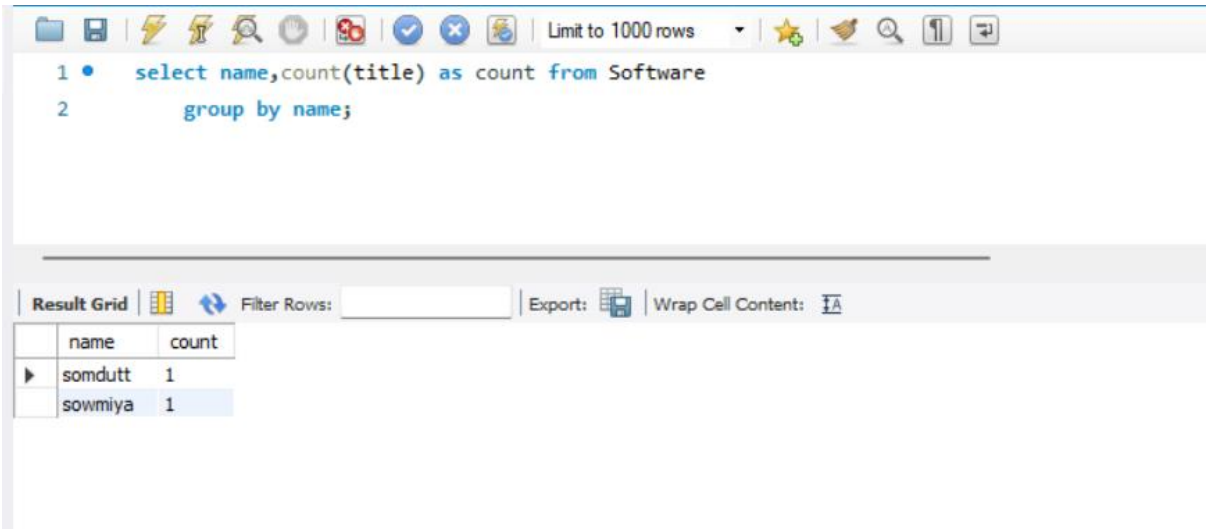
17) Display the sales values of the package developed inEACH programmer.

Commands:



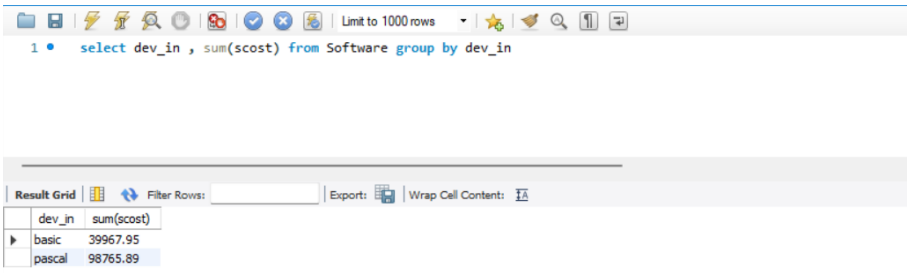
18) Display the NUMBER of packages developed by EACH programmer.

Commands:



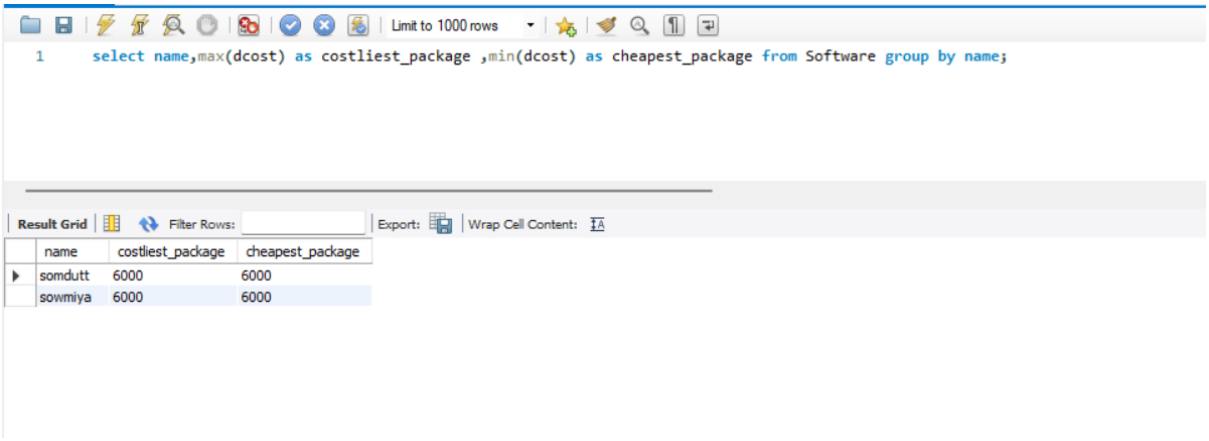
19) Display the sales COST of packages developed by EACH programmer language wise.

Commands:



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

Commands:



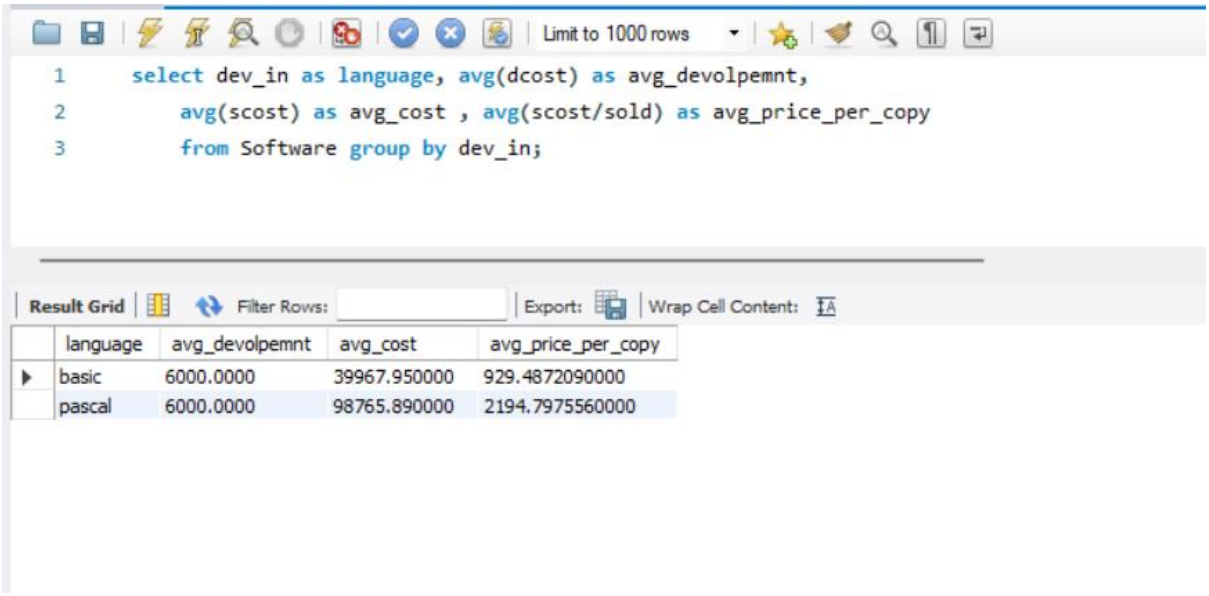
```
select name,max(dcost) as costliest_package ,min(dcost) as cheapest_package from Software group by name;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name	costliest_package	cheapest_package
somdutt	6000	6000
sowmiya	6000	6000

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

Commands:



```
select dev_in as language, avg(dcost) as avg_devolpemnt,
    avg(scost) as avg_cost , avg(scost/sold) as avg_price_per_copy
    from Software group by dev_in;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

language	avg_devolpemnt	avg_cost	avg_price_per_copy
basic	6000.0000	39967.950000	929.4872090000
pascal	6000.0000	98765.890000	2194.7975560000

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

```
select splace as institution, count(course) as number_of_courses,
    avg(ccost) as avg_cost_per_course from Studies group by splace;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

institution	number_of_courses	avg_cost_per_course
sabhari	1	4500
bdps	1	5000

23) Display EACH institute name with NUMBER of students.

Commands:

```
select splace as Institution ,count(name) from Studies
    group by splace;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Institution	count(name)
sabhari	1
bdps	1

24) Display names of male and female programmers.

Commands:

```
select name,sex from Programmer order by sex;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name	sex
sowmiya	f
kavila	f
sowmiyav	f
somdutt	m

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

Commands:

```
select name , title from Software order by name;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name	title
somdutt	parachutes
sowmi	parachutes
sowmiya	parachutes

26) Display the NUMBER of packages in EACH language.

Commands:

```
select dev_in as language , count(title) from software
    group by dev_in;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

language	count(title)
basic	1
pascal	2

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

Commands:

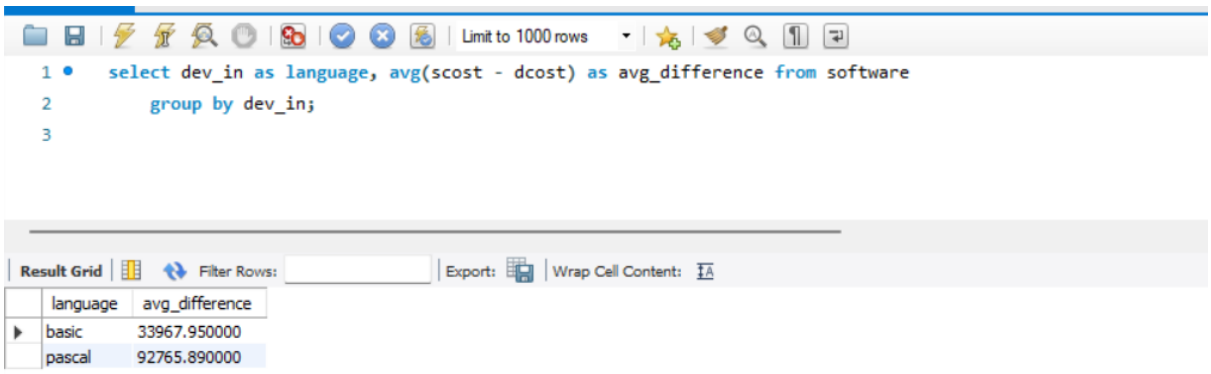
```
select dev_in as language , count(title) as total from Software where dcost<1000
    group by dev_in
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

language	total

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

Commands:



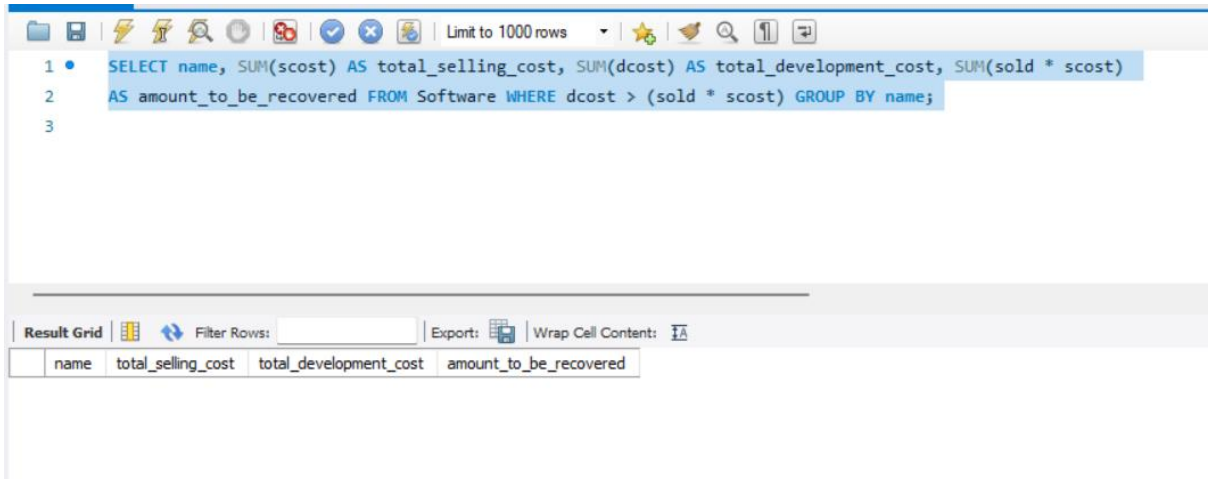
```
select dev_in as language, avg(scost - dcost) as avg_difference from software
    group by dev_in;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

language	avg_difference
basic	33967.950000
pascal	92765.890000

29) Display the TOTAL scost, dcsot and amount TO BE recovered for EACH programmer for whose dcost HAS NOT YET BEEN recovered.

Commands:



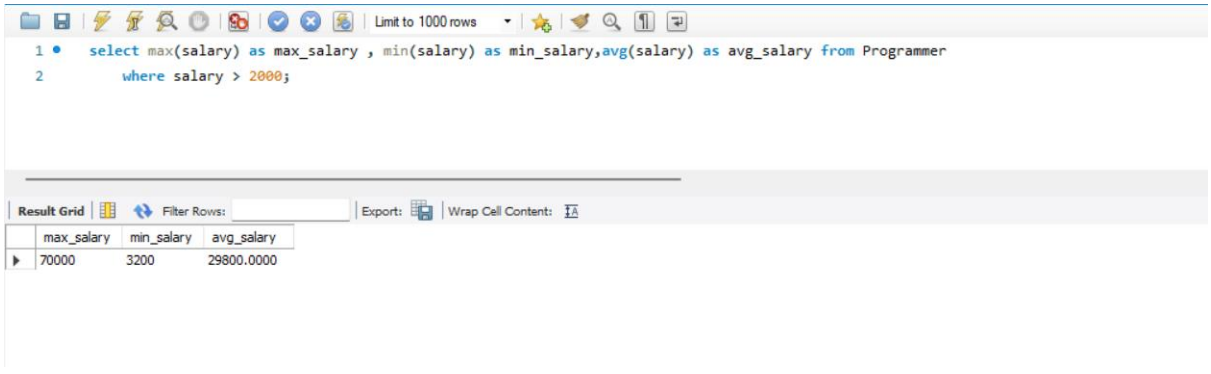
```
SELECT name, SUM(scost) AS total_selling_cost, SUM(dcost) AS total_development_cost, SUM(sold * scost)
AS amount_to_be_recovered FROM Software WHERE dcost > (sold * scost) GROUP BY name;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name	total_selling_cost	total_development_cost	amount_to_be_recovered

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

Commands:



```
select max(salary) as max_salary , min(salary) as min_salary,avg(salary) as avg_salary from Programmer
    where salary > 2000;
```

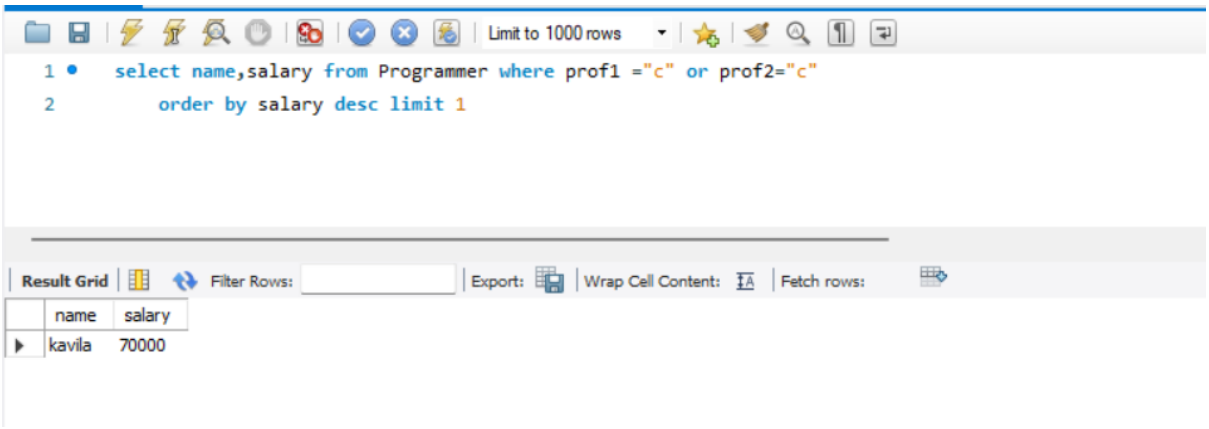
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

max_salary	min_salary	avg_salary
70000	3200	29800.0000

QUERIES – III

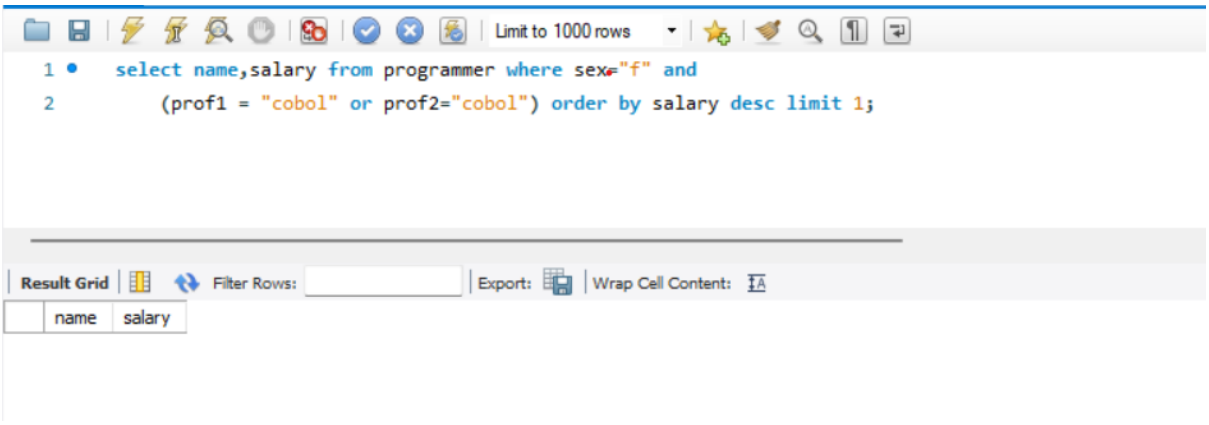
1) Who is the highest paid C programmer?

Commands:



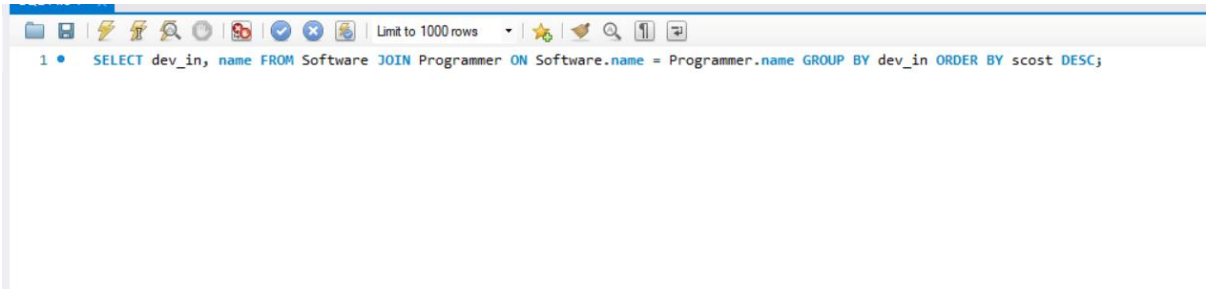
2) Who is the highest paid female cobol programmer?

Commands:



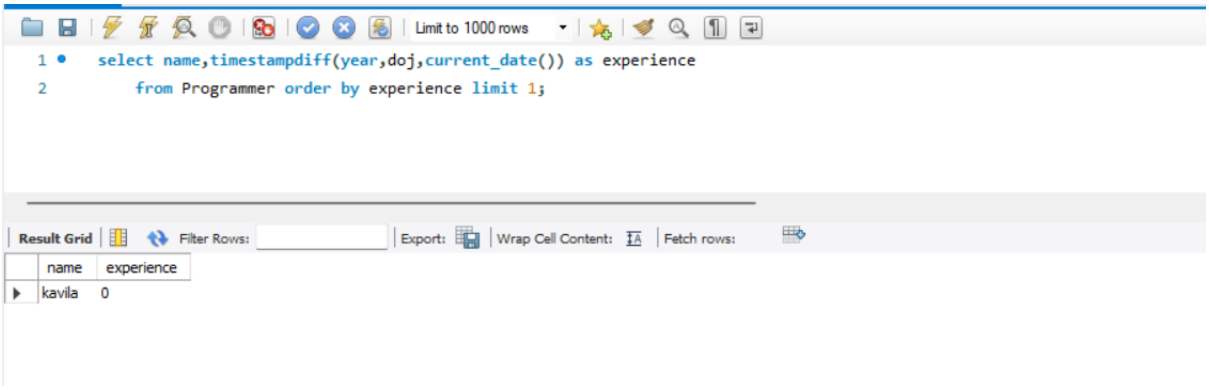
3) Display the name of the HIGEST paid programmer for EACH language (prof1)

Commands:



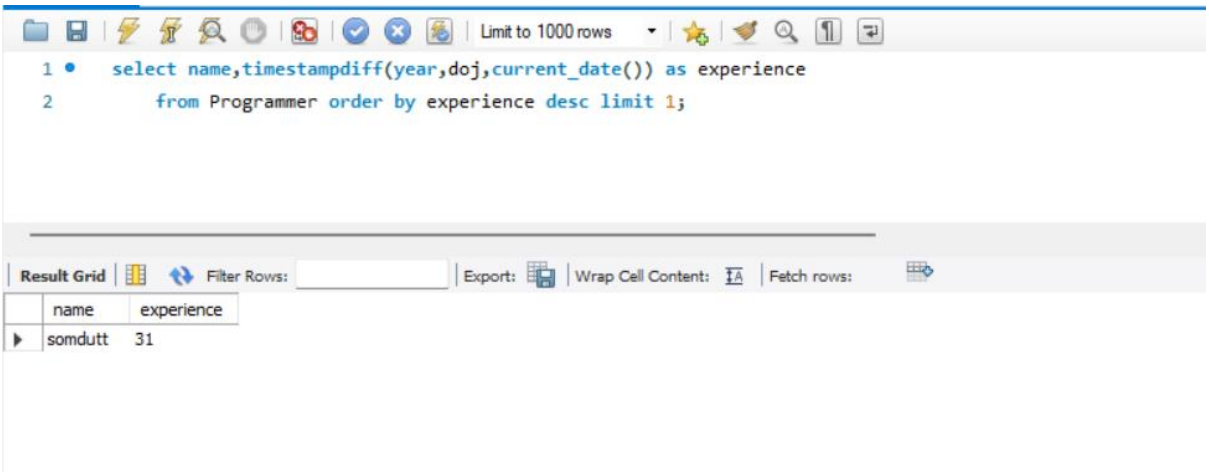
4) Who is the LEAST experienced programmer?

Commands:



5) Who is the MOST experienced programmer?

Commands:



6) Which language is known by ONLY ONE programmer?

Commands:

```
select dev_in as language , count(*) as count from Software
    group by language having count =1;
```

language	count
basic	1

```
select language from( select prof1 as language from Programmer union all
    select prof2 as language from Programmer)combined_language group by language
    having count(*) = 1;
```

language

7) Who is the YONGEST programmer knowing DBASE?

Commands:

```
select name, timestampdiff(year,dob,current_date()) as age from Programmer
    where (prof1="dbase" or prof2="dbase") order by age limit 1;
```

name	age

8) Which institute has MOST NUMBER of students?

```
select splace as institue , count(*) as student from Studies
    group by splace order by student desc limit 1;
```

institue	student
sabhari	1

9) Who is the above programmer?

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

Commands:

```
select name,salary from Programmer where sex="f" and salary >3000
    and prof1 NOT IN('C', 'C++', 'Oracle', 'DBASE') and prof2 NOT IN ('C', 'C++', 'Oracle', 'DBASE');
```

name	salary

11) Which is the COSTLIEST course?

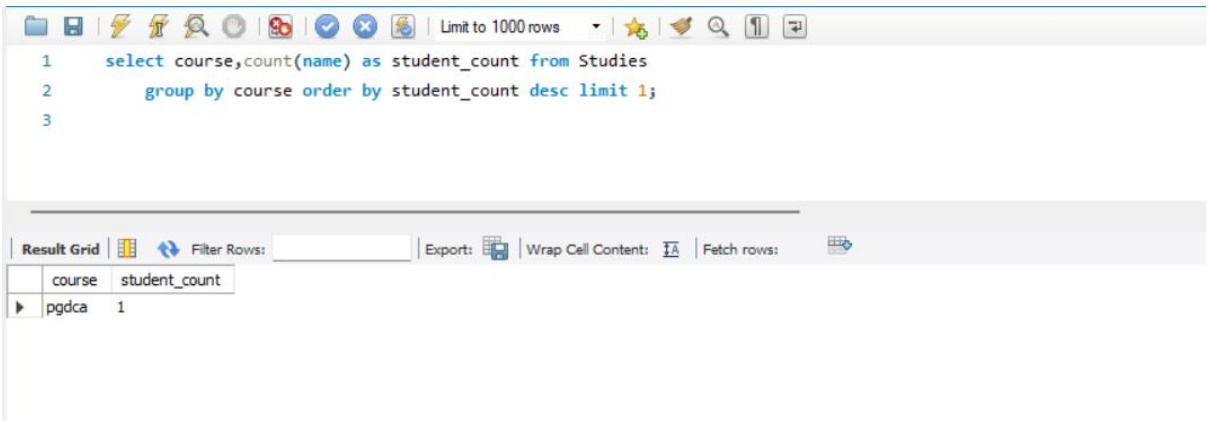
Commands:

```
course,ccost as course_cost from Studies order by ccost desc limit 1;
```

course	course_cost
dcs	5000

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

Commands:

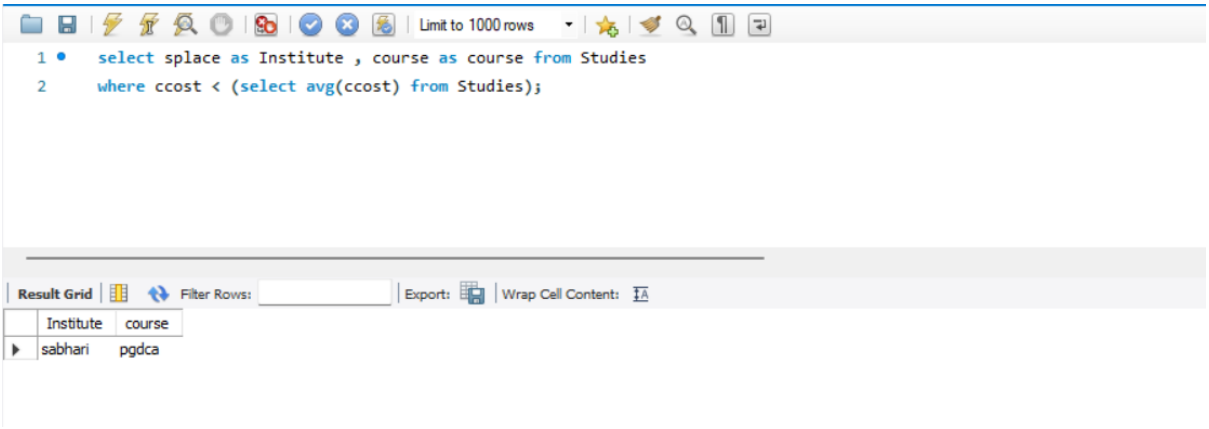


```
select course,count(name) as student_count from Studies
    group by course order by student_count desc limit 1;
```

course	student_count
pgdca	1

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

Commands:



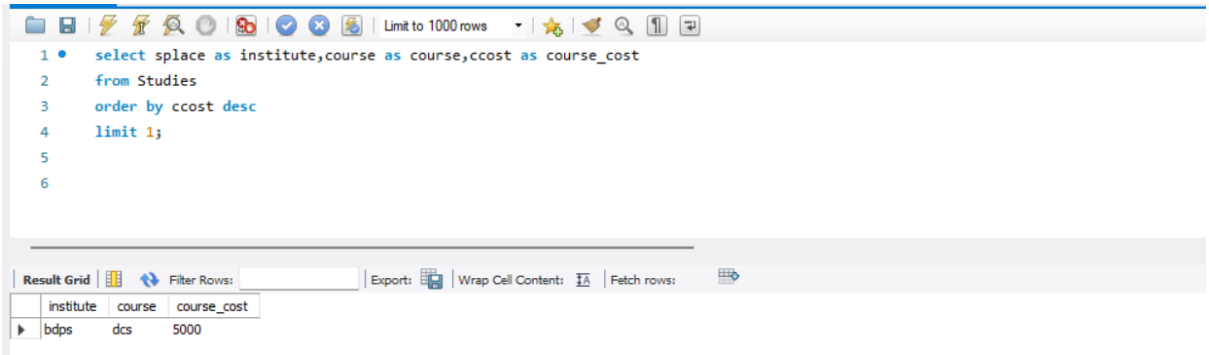
```
select splace as Institute , course as course from Studies
where ccost < (select avg(ccost) from Studies);
```

Institute	course
sabhari	pgdca

14) Which institute conducts COSTLIEST course?

Commands:

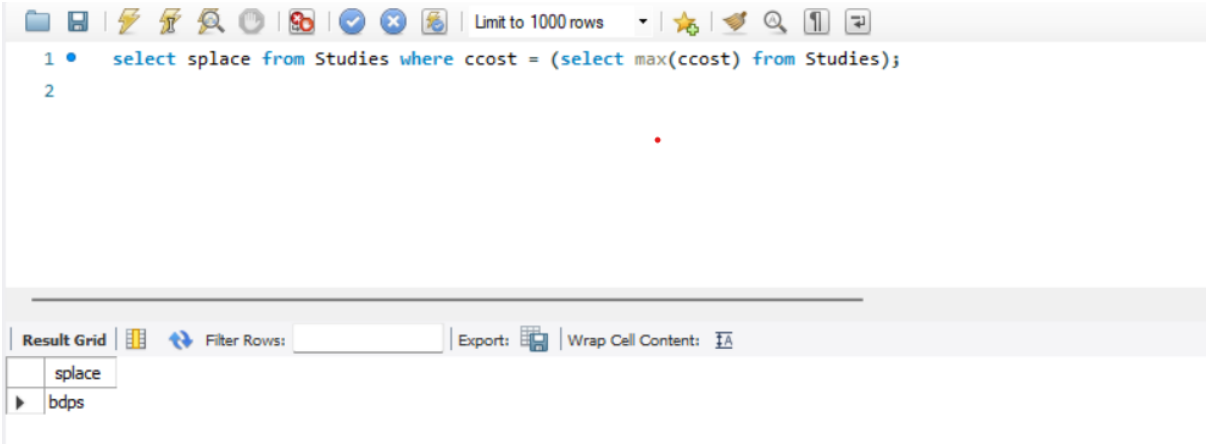
Method 1:



```
select splace as institute,course as course,ccost as course_cost
from Studies
order by ccost desc
limit 1;
```

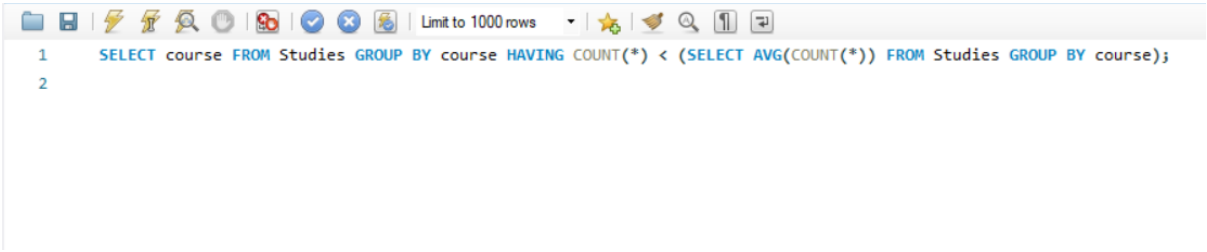
institute	course	course_cost
bdps	dcs	5000

Method 2:



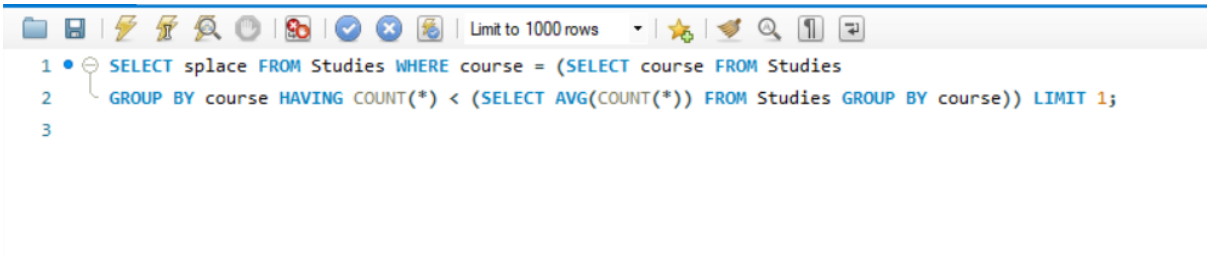
15) Which course has below AVERAGE number of students?

Commands:



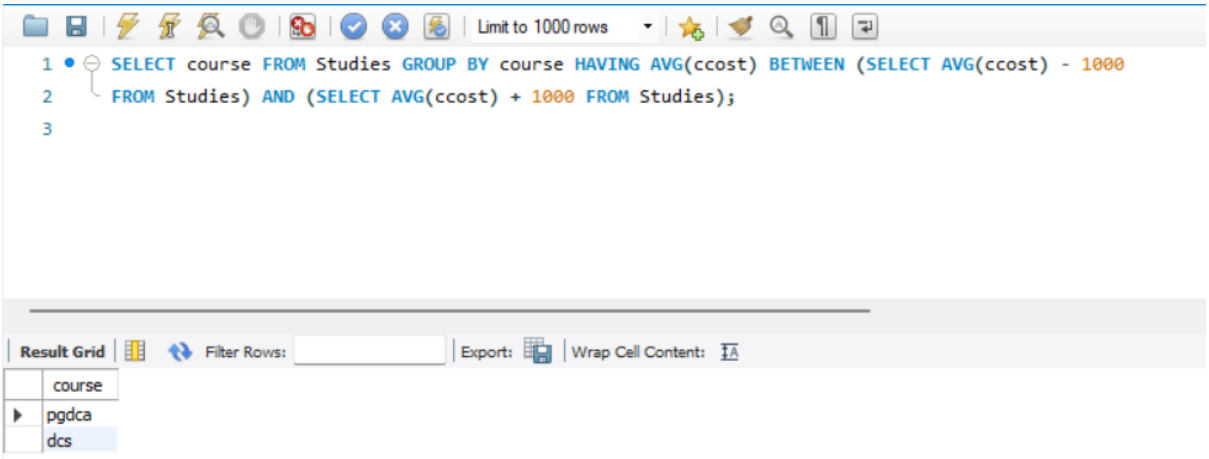
16) Which institute conducts the above course?

Commands:



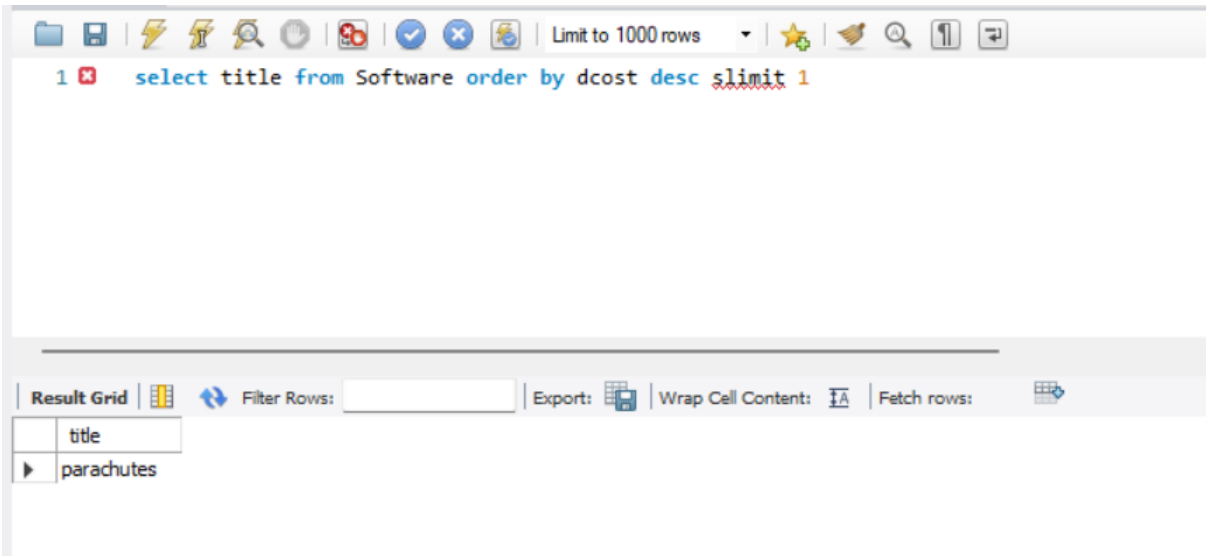
17) Display names of the course WHOSE fees are within 1000(+ or -) of the AVERAGE fee.

Commands:



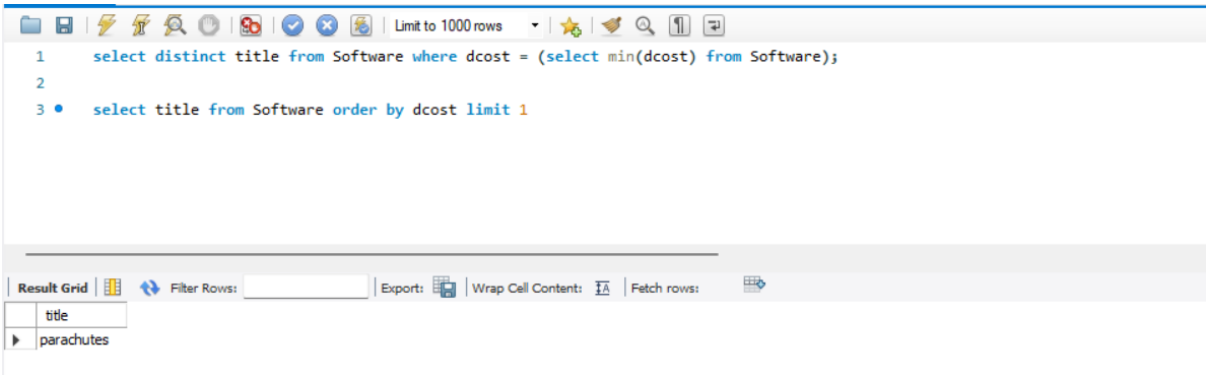
18) Which package has the HIGEST development cost?

Commands:



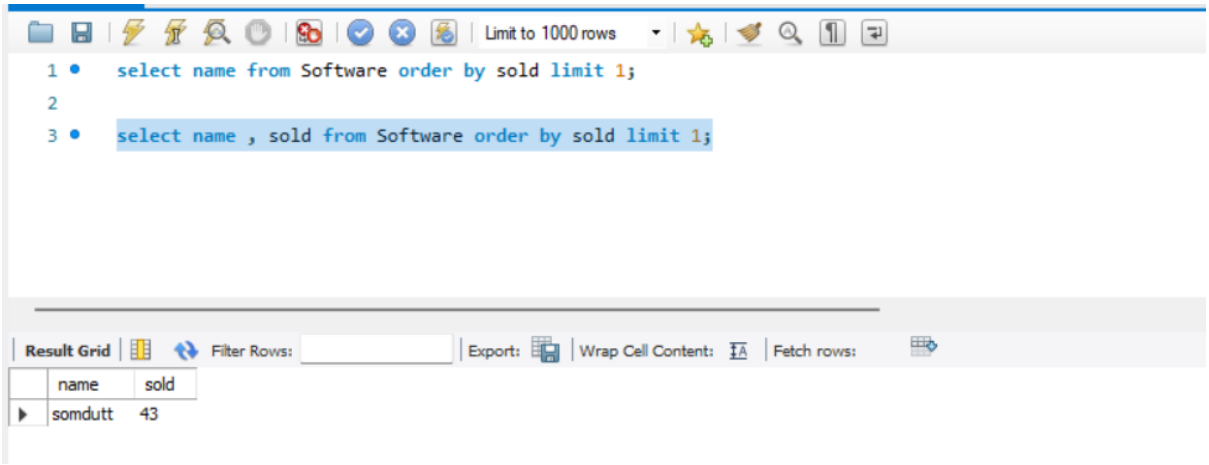
19) Which package has the LOWEST selling cost?

Commands:



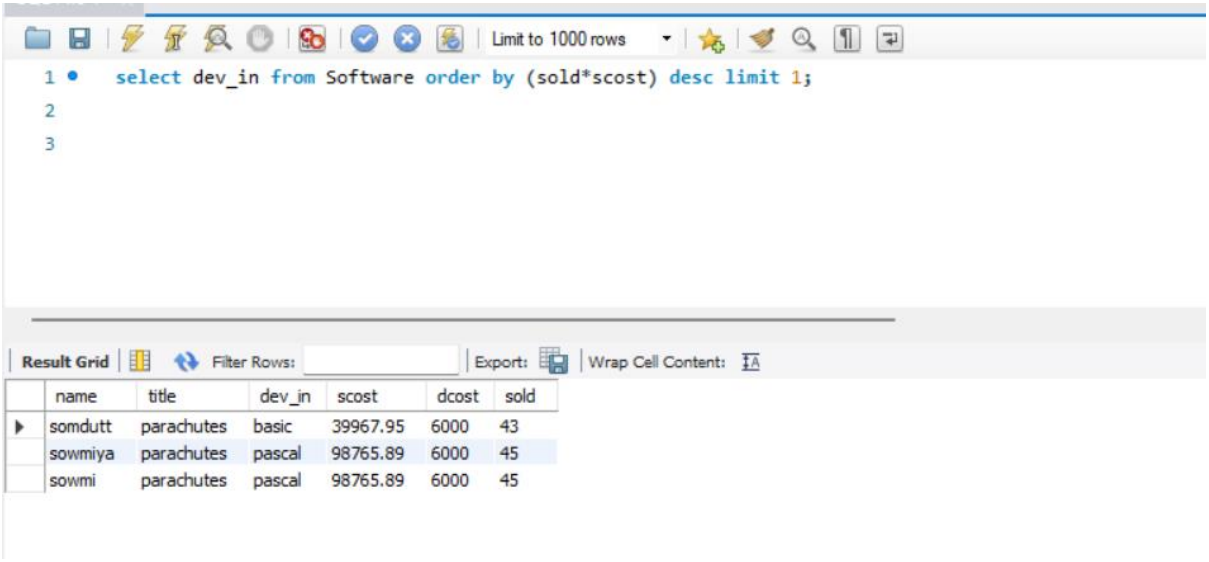
20) Who developed the package, which has sold the LEAST number of copies?

Commands:



21) Which language was used to develop the package WHICH has the HIGEST sales amount?

commands:

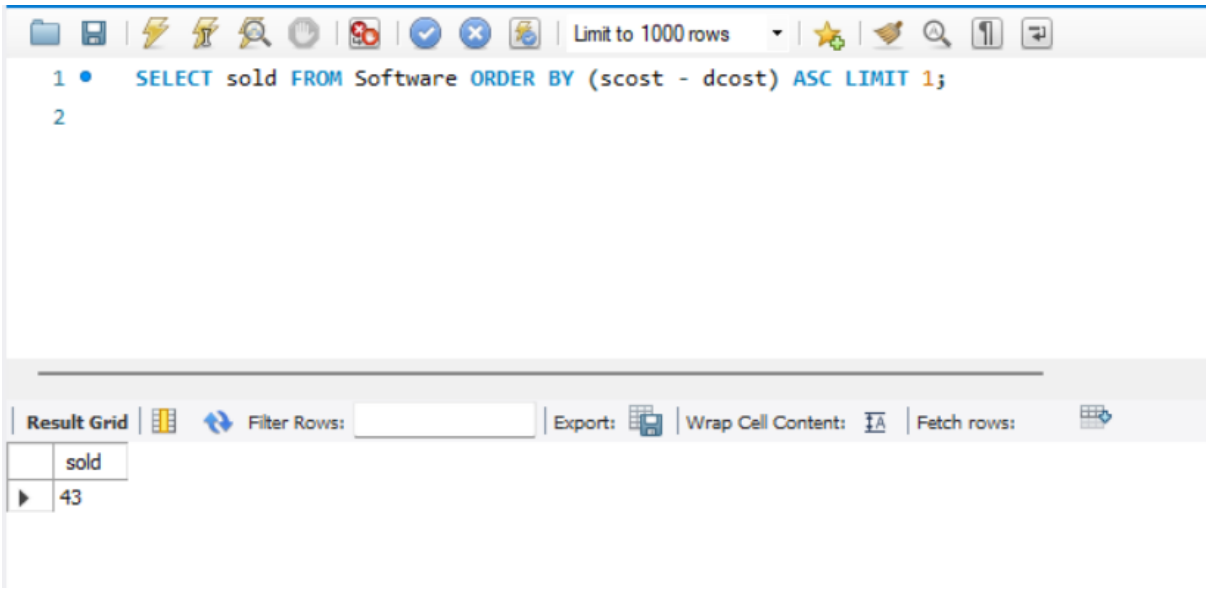


```
select dev_in from Software order by (sold*scost) desc limit 1;
```

name	title	dev_in	scost	dcost	sold
somdutt	parachutes	basic	39967.95	6000	43
sowmiya	parachutes	pascal	98765.89	6000	45
sowmi	parachutes	pascal	98765.89	6000	45

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

Commands:



```
SELECT sold FROM Software ORDER BY (scost - dcost) ASC LIMIT 1;
```

sold
43

23) Which is the COSTLIEAST package developed in PASCAL?

Commands:

```
select title from Software where dev_in="pascal" and dcost = (select max(dcost) from Software);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

title
parachutes
parachutes

```
select name as package_name from Software where dev_in="pascal"
    order by dcost desc limit 1;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

package_name
sowmiya

24) Which language was used to develop the MOST NUMBER of package?

Commands:

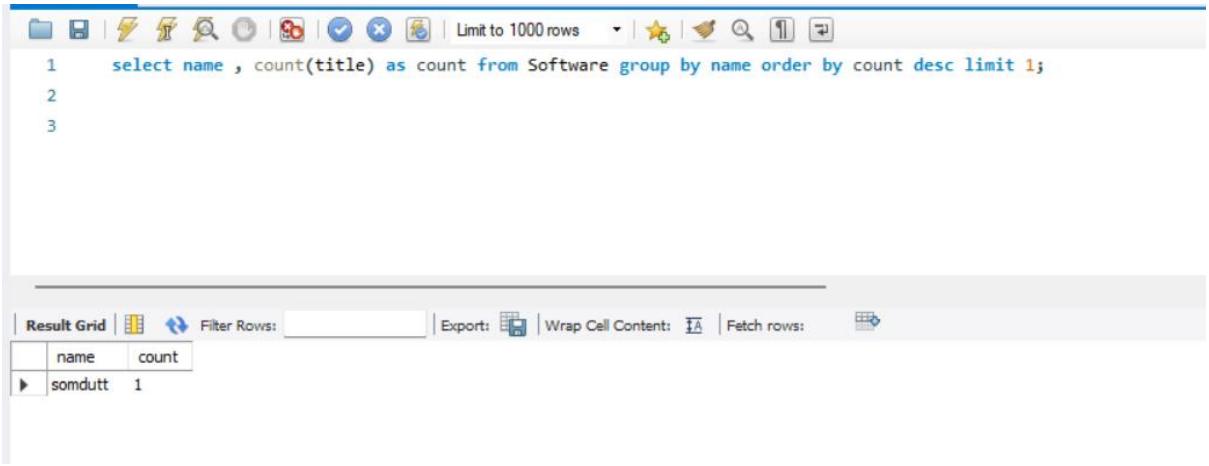
```
select dev_in as language , count(title) as count from Software group by language order by count desc limit 1;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

language	count
pascal	2

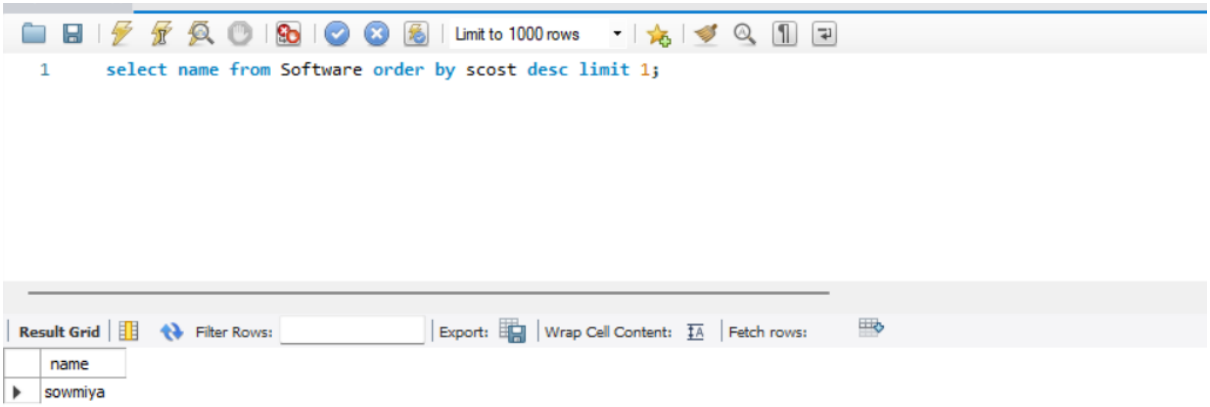
25) Which programmer has developed the HIGEST NUMBER of package?

Commands:



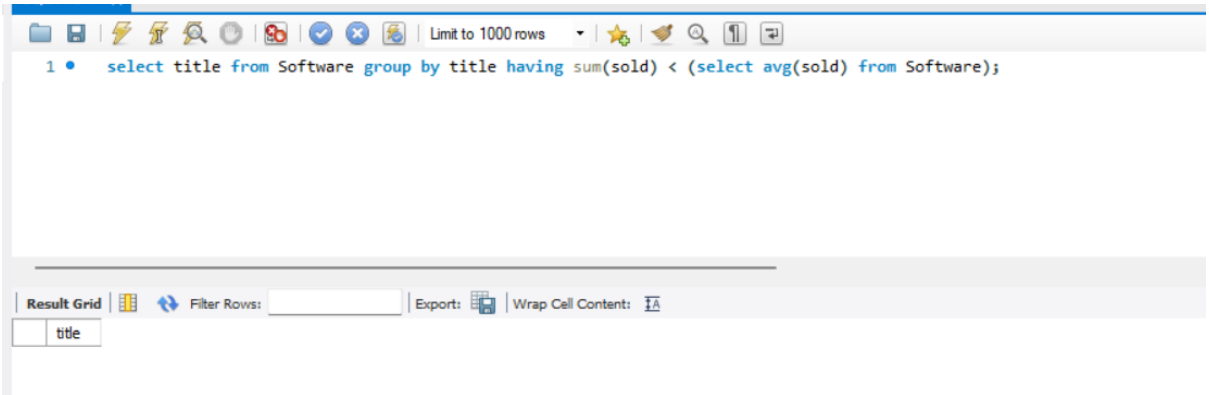
26) Who is the author of the COSTLIEST package?

Commands:



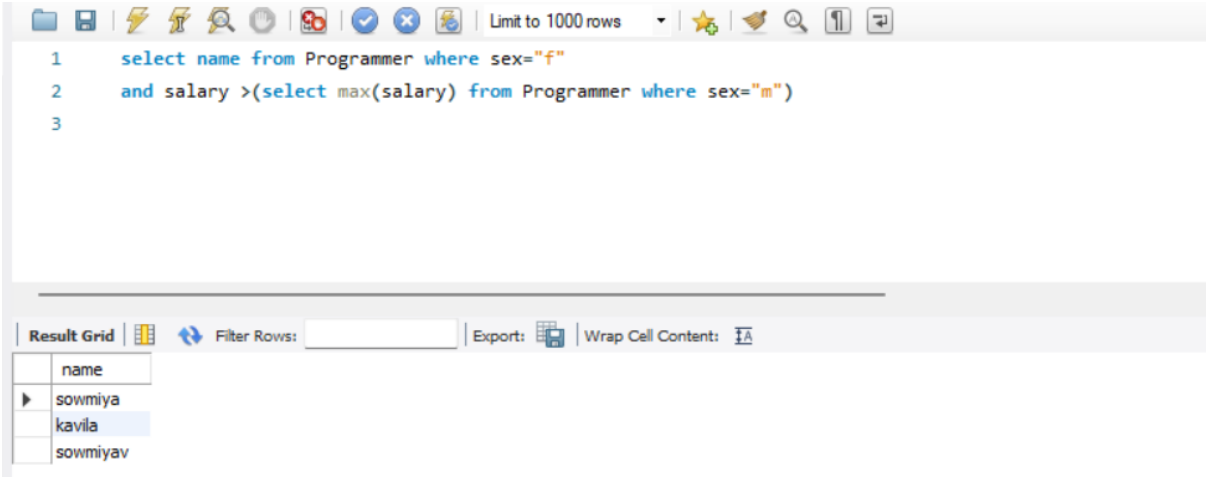
27) Display names of packages WHICH have been sold LESS THAN the AVERAGE number of copies?

Commands:



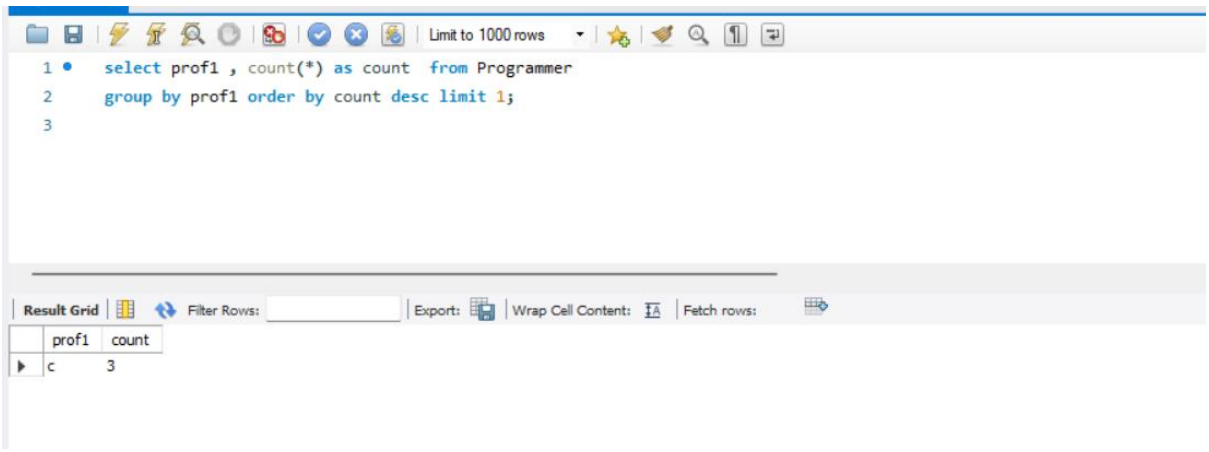
28) Who are the female programmers earning MORE than the HIGEST paid male programmers?

Commands:



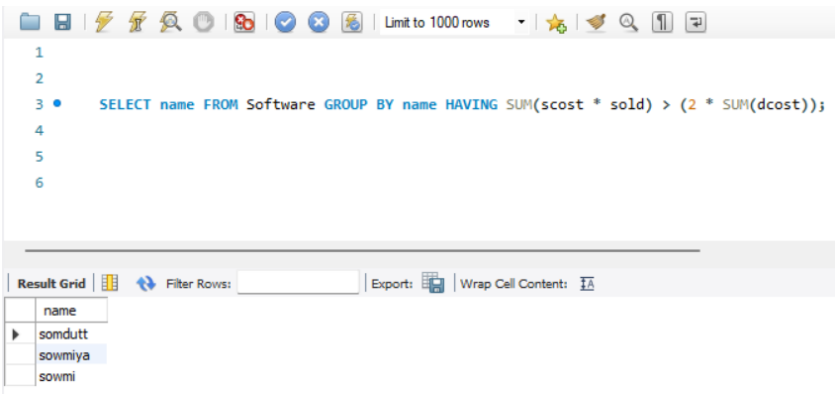
29) Which language has been stated as prof1 by MOST of the programmers?

Commands:



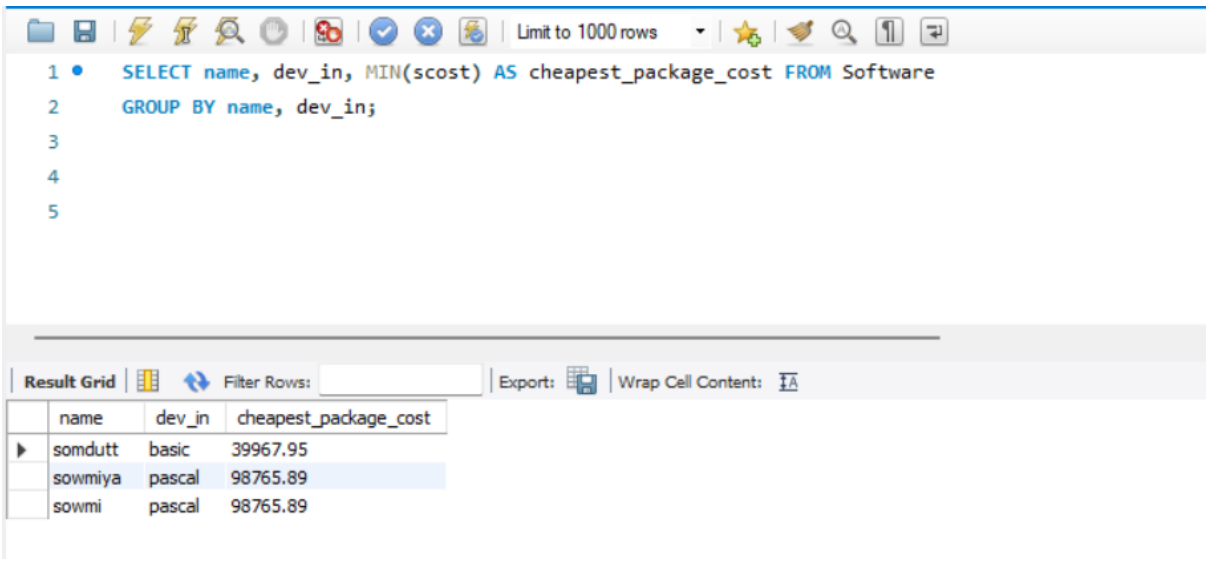
30) Who are the authors of packages, WHICH have recovered MORE THAN double the development cost?

Commands:



31) Display programmer names and CHEAPEST package developed by them in EACH language?

Commands:



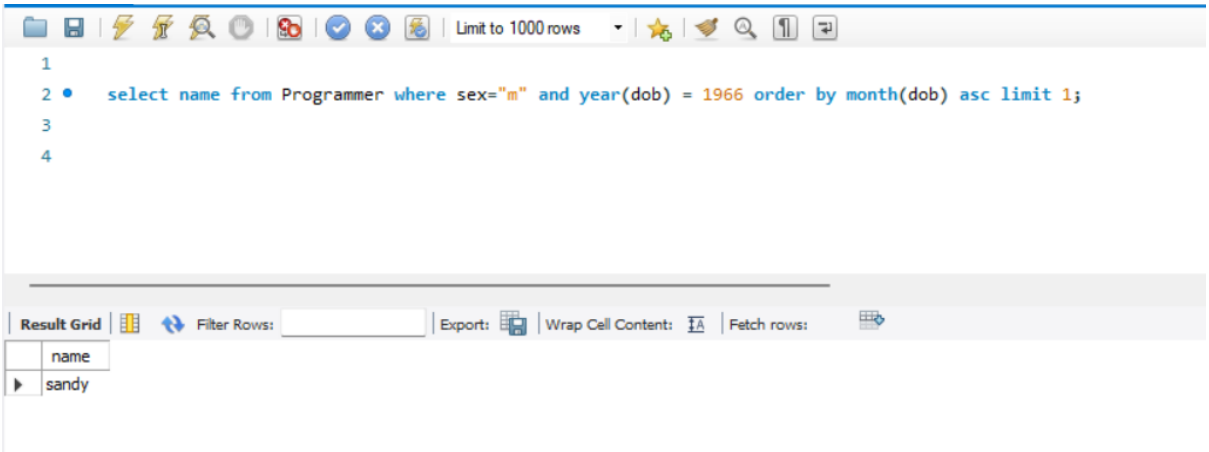
```
SELECT name, dev_in, MIN(scost) AS cheapest_package_cost FROM Software
GROUP BY name, dev_in;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name	dev_in	cheapest_package_cost
somdutt	basic	39967.95
sowmiya	pascal	98765.89
sowmi	pascal	98765.89

32) Who is the YOUNGEST male programmer born in 1965?

Commands:



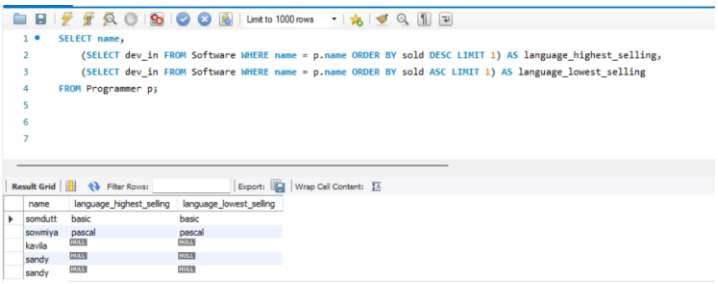
```
select name from Programmer where sex="m" and year(dob) = 1966 order by month(dob) asc limit 1;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

name
sandy

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

Commands:

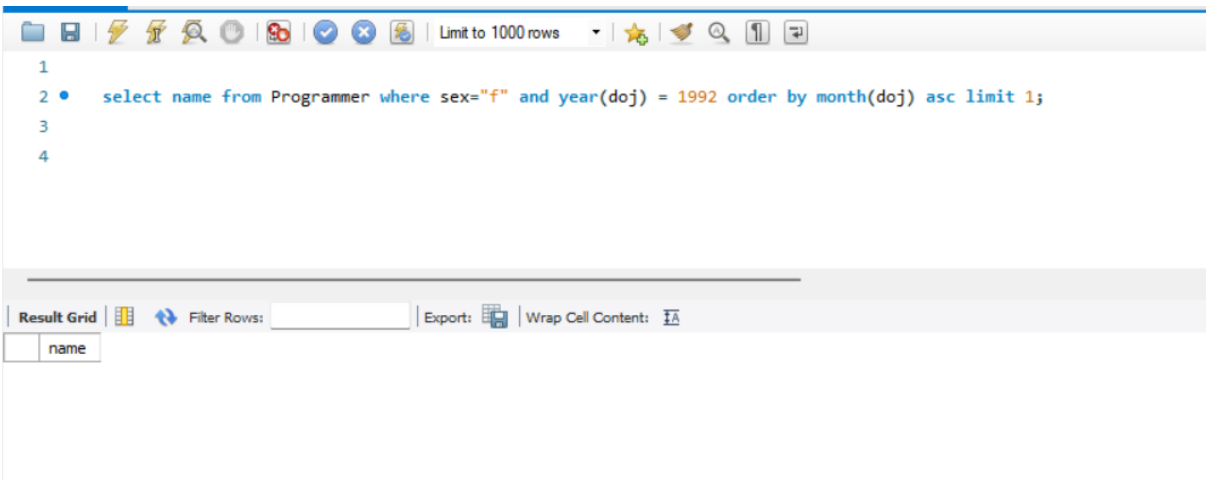


```
SELECT name,
    (SELECT dev_in FROM Software WHERE name = p.name ORDER BY sold DESC LIMIT 1) AS language_highest_selling,
    (SELECT dev_in FROM Software WHERE name = p.name ORDER BY sold ASC LIMIT 1) AS language_lowest_selling
FROM Programmer p;
```

name	language_highest_selling	language_lowest_selling
somdutt	basic	basic
sowmiya	pascal	pascal
kavila	NULL	NULL
sandy	NULL	NULL
sandy	NULL	NULL

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

Commands:



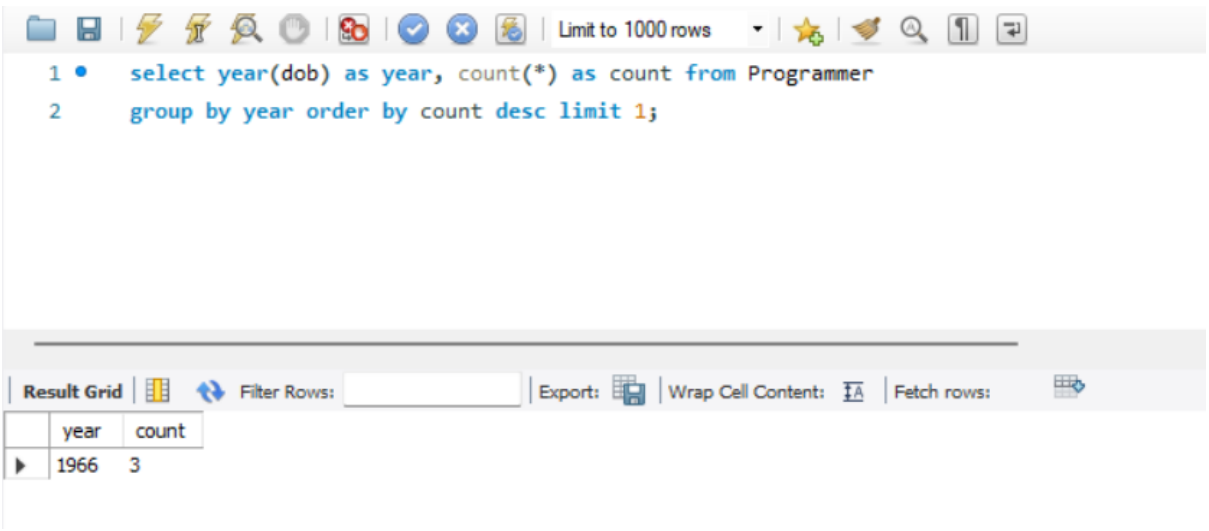
```
select name from Programmer where sex="f" and year(doj) = 1992 order by month(doj) asc limit 1;
```

Result Grid

name

35) In WHICH year where the MOST NUMBER of programmer born?

Commands:



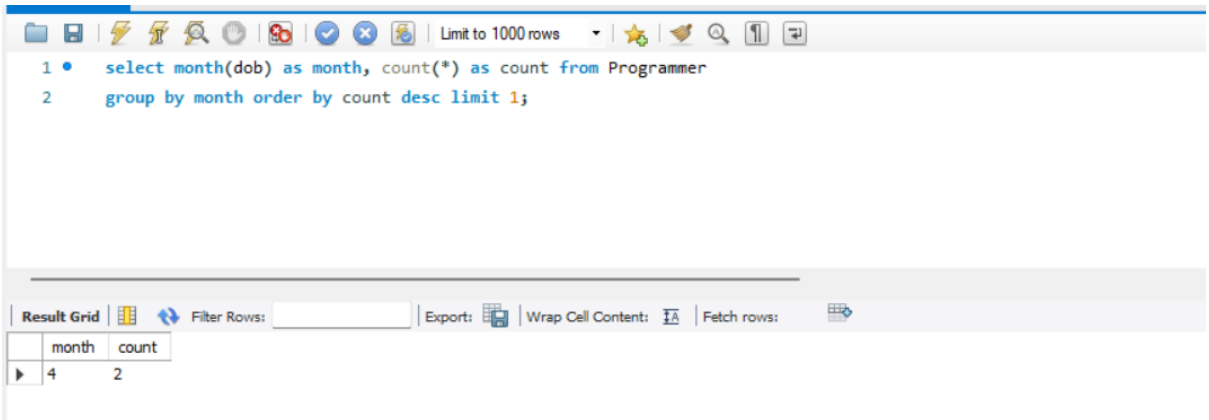
```
select year(dob) as year, count(*) as count from Programmer
group by year order by count desc limit 1;
```

Result Grid

year	count
1966	3

36) In WHICH month did MOST NUMBRER of programmer join?

Commands:



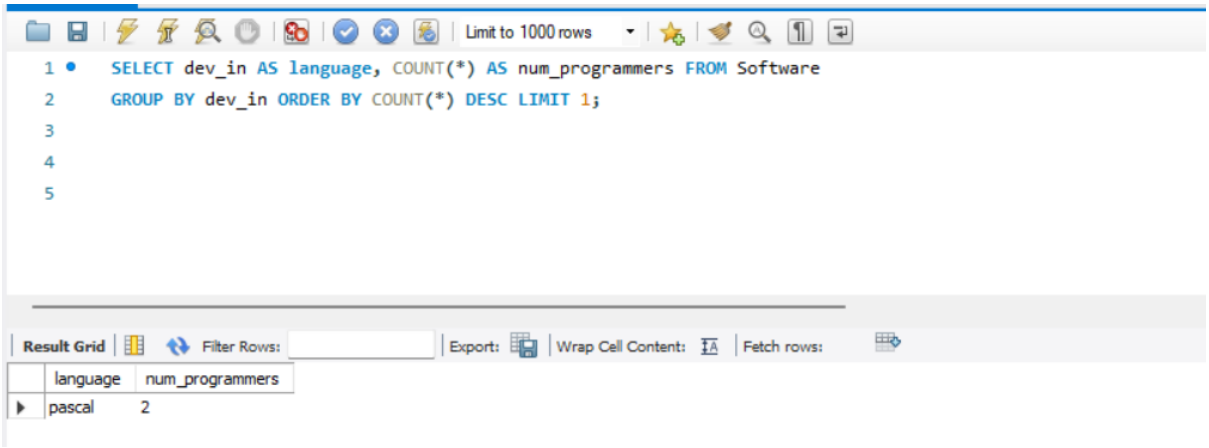
```
select month(dob) as month, count(*) as count from Programmer
group by month order by count desc limit 1;
```

Result Grid

month	count
4	2

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

Commands:



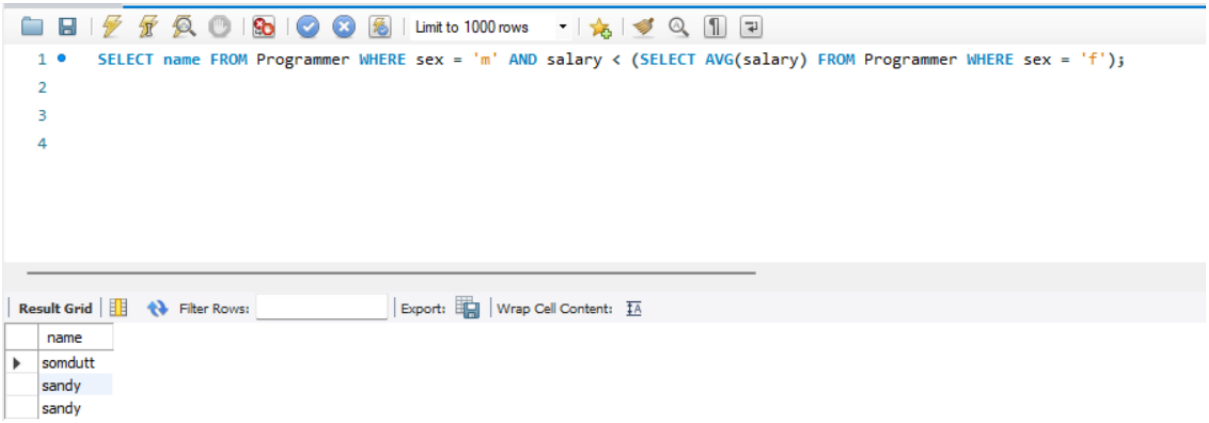
```
SELECT dev_in AS language, COUNT(*) AS num_programmers FROM Software
GROUP BY dev_in ORDER BY COUNT(*) DESC LIMIT 1;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

language	num_programmers
pascal	2

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

Commands:



```
SELECT name FROM Programmer WHERE sex = 'm' AND salary < (SELECT AVG(salary) FROM Programmer WHERE sex = 'f');
```

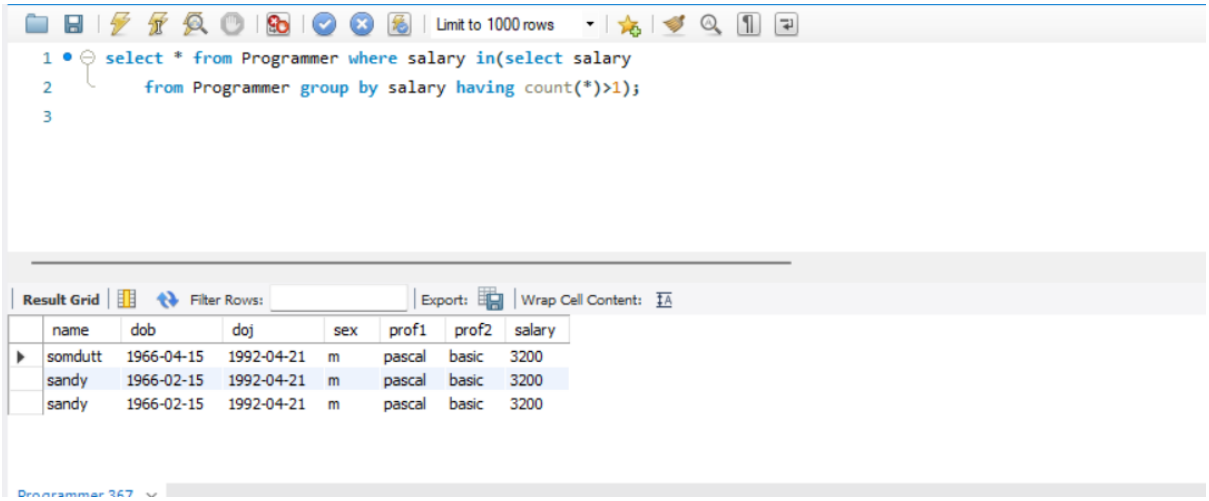
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name
somdutt
sandy
sandy

QUERIES – IV

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

Commands:

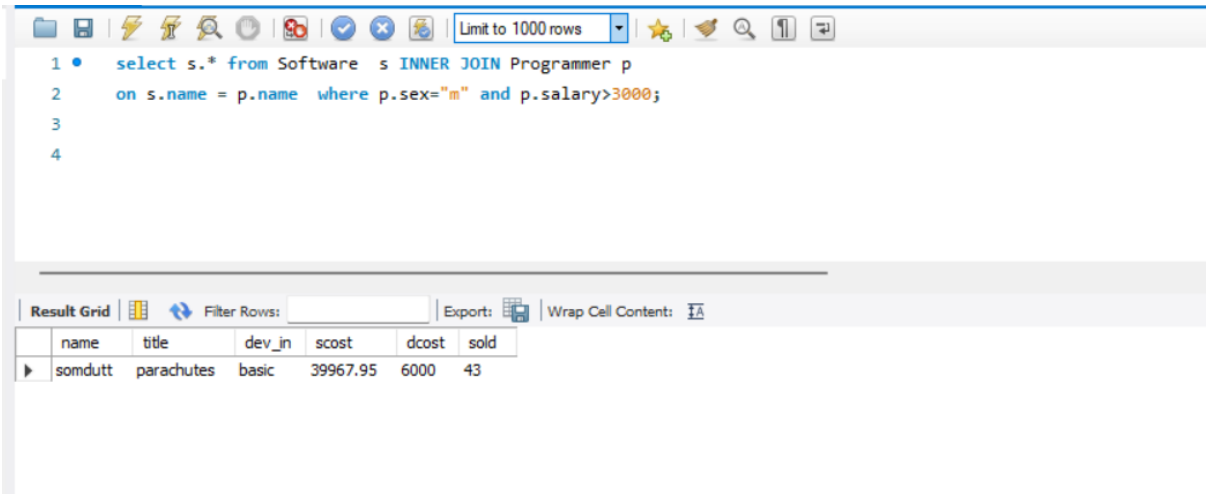


```
select * from Programmer where salary in(select salary
    from Programmer group by salary having count(*)>1);
```

name	dob	doj	sex	prof1	prof2	salary
somdutt	1966-04-15	1992-04-21	m	pascal	basic	3200
sandy	1966-02-15	1992-04-21	m	pascal	basic	3200
sandy	1966-02-15	1992-04-21	m	pascal	basic	3200

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

Commands:

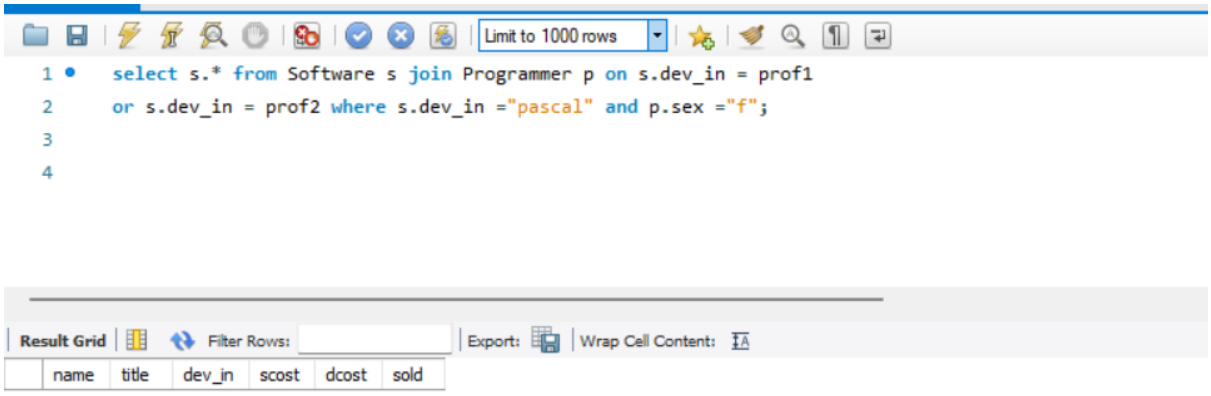


```
select s.* from Software  s INNER JOIN Programmer p
on s.name = p.name  where p.sex="m" and p.salary>3000;
```

name	title	dev_in	scost	dcost	sold
somdutt	parachutes	basic	39967.95	6000	43

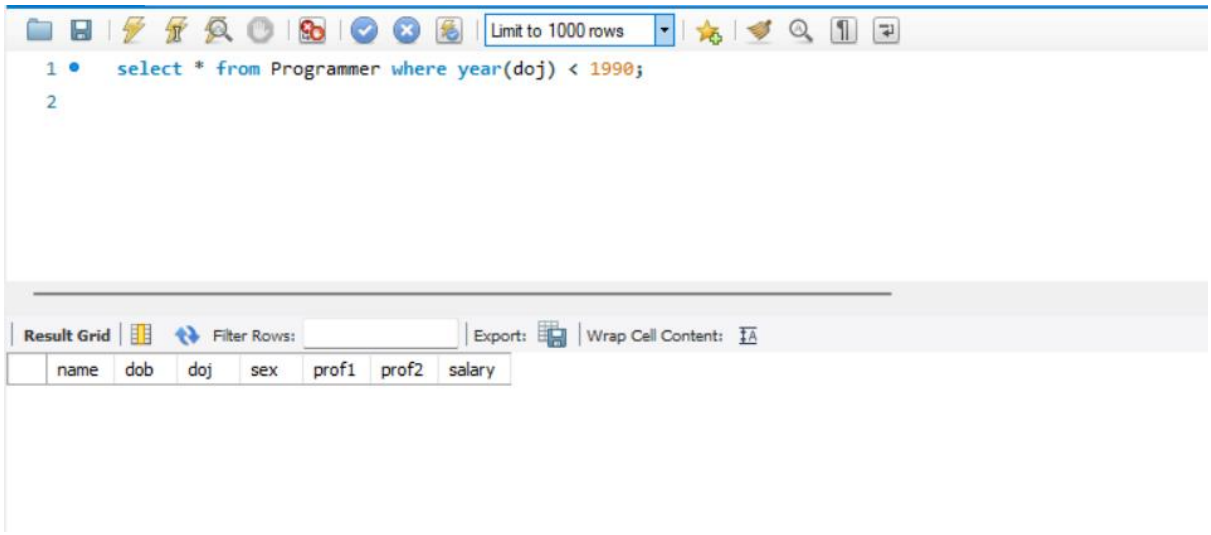
3) Display details of packages developed in PASCAL by female programmers.

Commands:



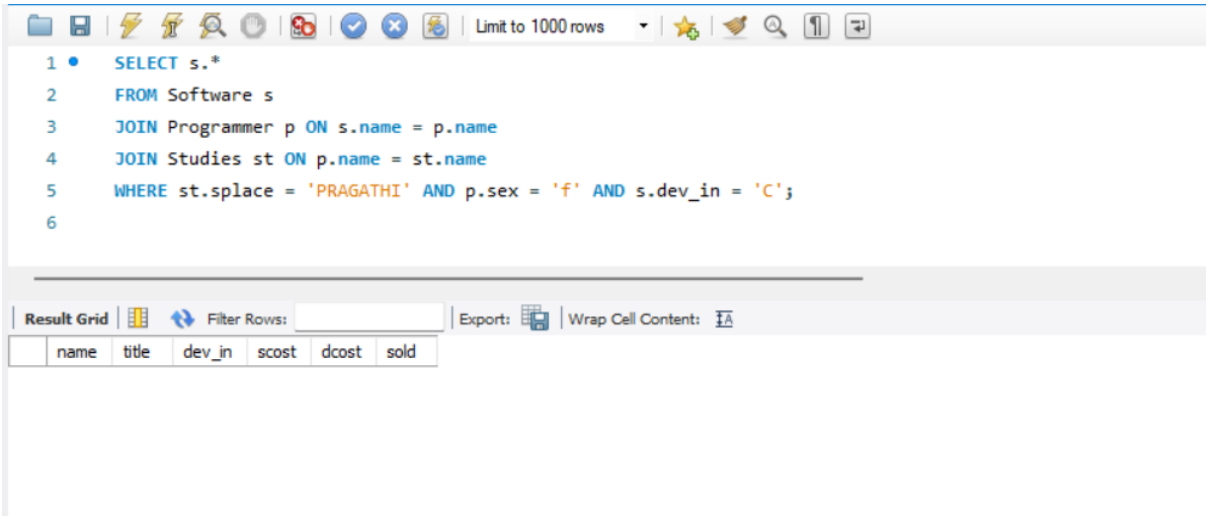
4) Display the details of the programmer WHO joined BEFORE 1990.

Commands:



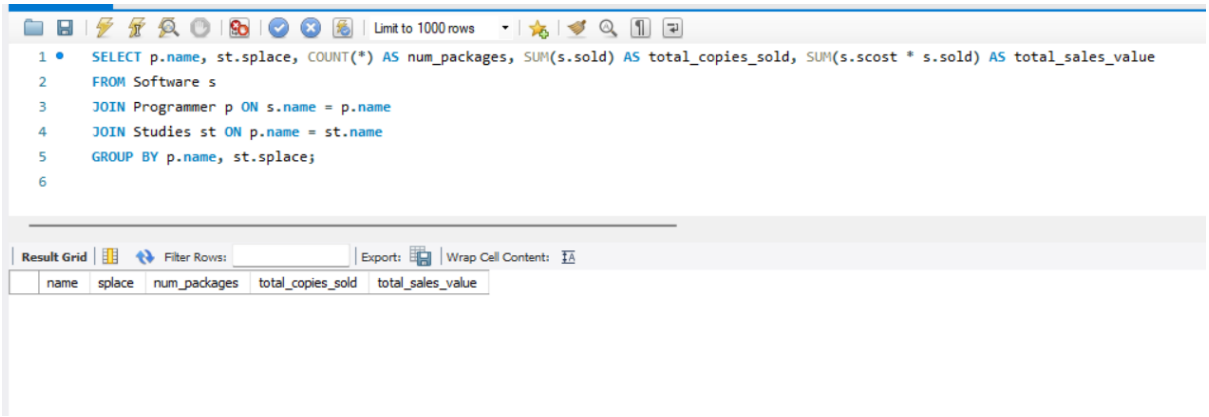
5) Display details of software developed in C by female programmers of PRAGATHI.

Commands:



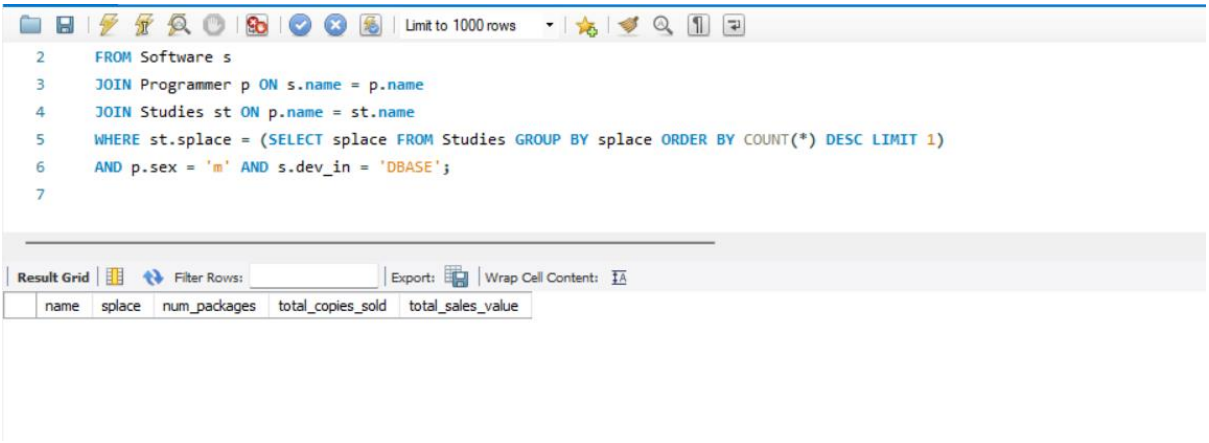
6) Display NUMBER of packages NUMBER of copies sold and sales value of EACH programmer Institute-wise.

Commands



7) Display details of software developed in DBASE by male programmers WHO belong to the institute on which MOST NUMBER OF programmer's studies.

Commands:



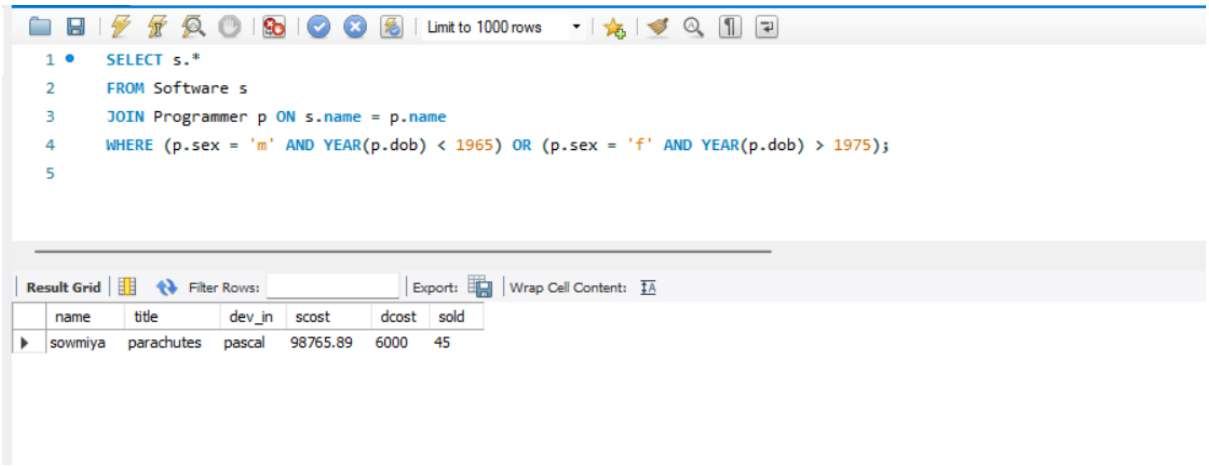
```
    FROM Software s
    JOIN Programmer p ON s.name = p.name
    JOIN Studies st ON p.name = st.name
    WHERE st.splace = (SELECT splace FROM Studies GROUP BY splace ORDER BY COUNT(*) DESC LIMIT 1)
    AND p.sex = 'm' AND s.dev_in = 'DBASE';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name	splace	num_packages	total_copies_sold	total_sales_value

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

Commands:



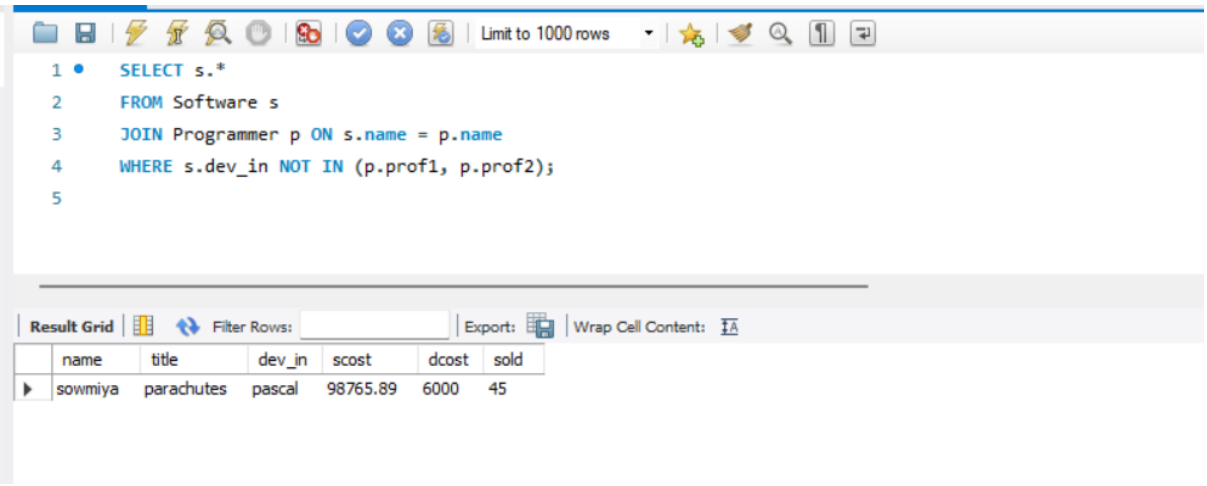
```
SELECT s.*
FROM Software s
JOIN Programmer p ON s.name = p.name
WHERE (p.sex = 'm' AND YEAR(p.dob) < 1965) OR (p.sex = 'f' AND YEAR(p.dob) > 1975);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name	title	dev_in	scost	dcost	sold
sowmiya	parachutes	pascal	98765.89	6000	45

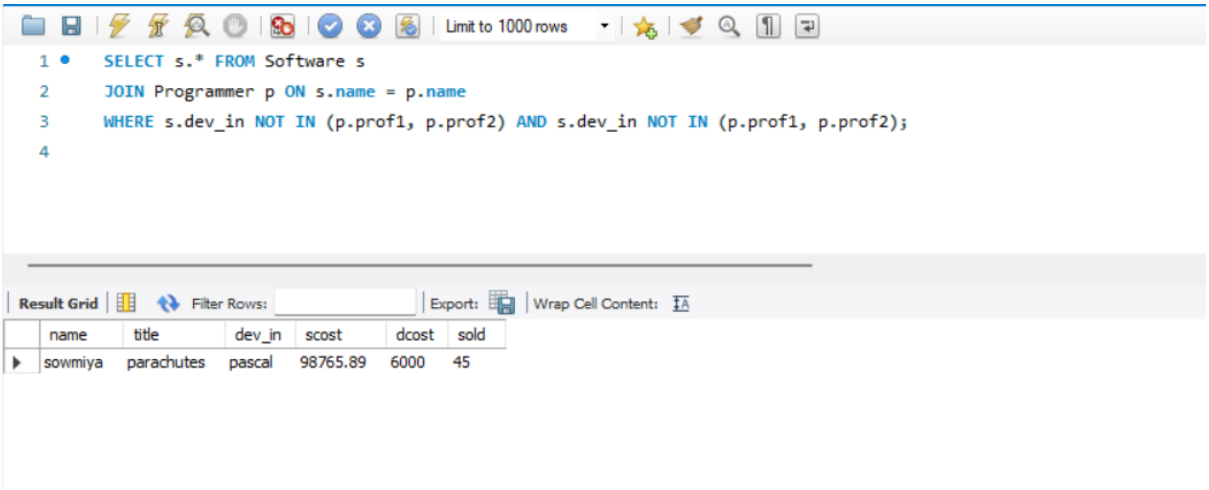
9) Display the details of the software that was developed in the language that is NOT the programmer's first proficiency.

Commands:



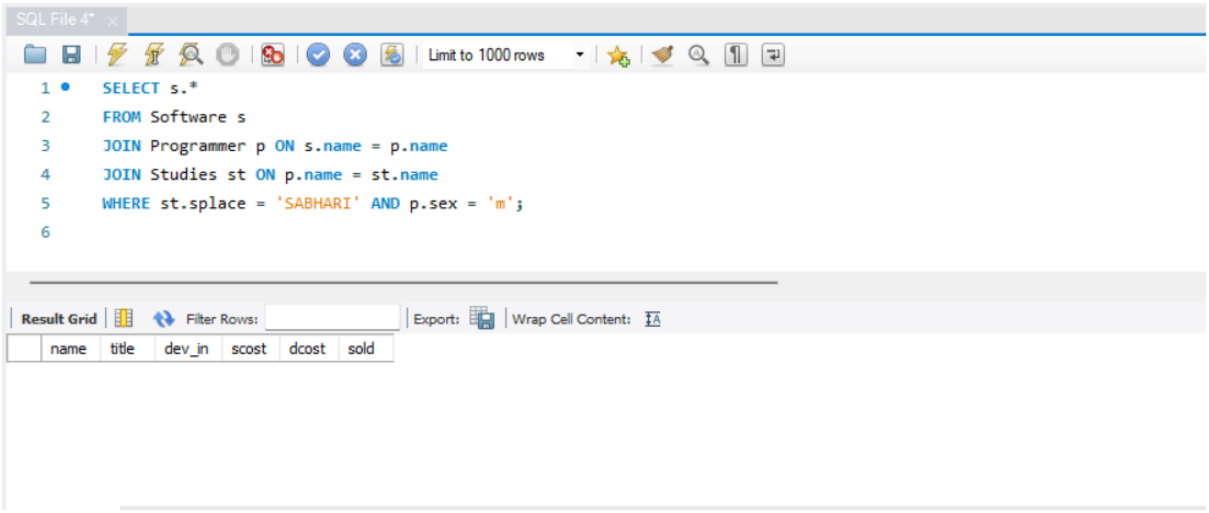
10) Display details of software that was developed in the language which is NEITHER first NOR second proficiency of the programmer.

Commands:



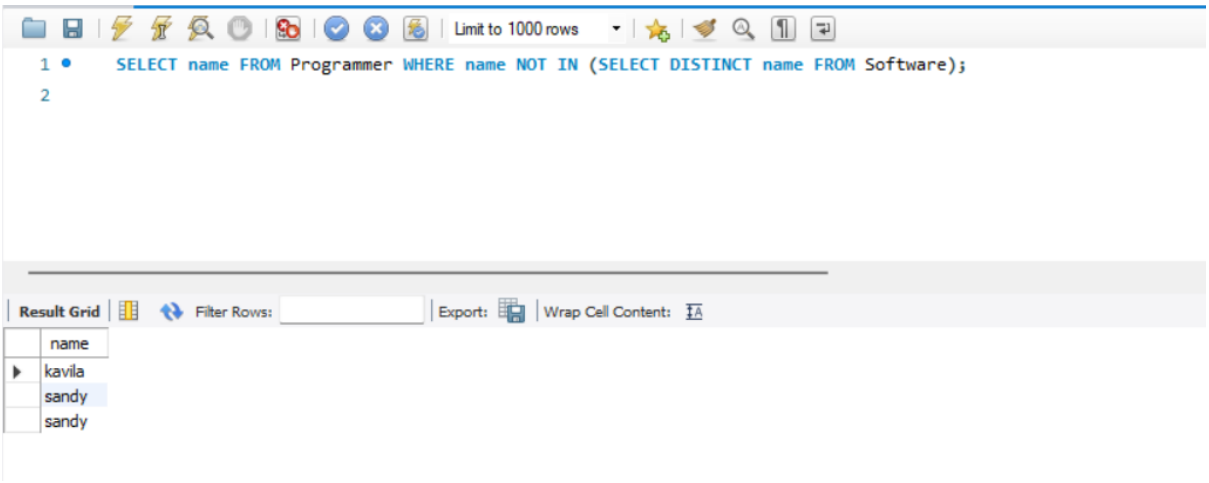
11) Display details of software developed by male students of SABHARI.

Commands:



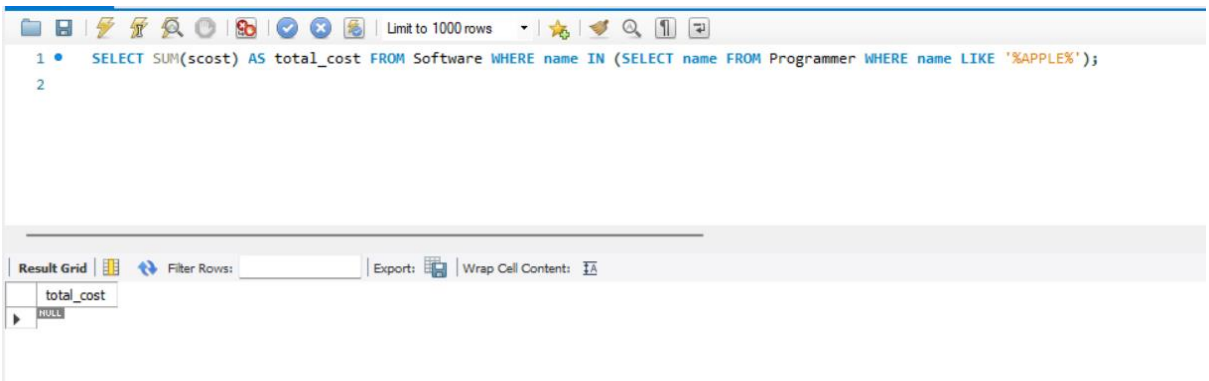
12) Display the names of programmers WHO HAVE NOT developed any package.

Commands:



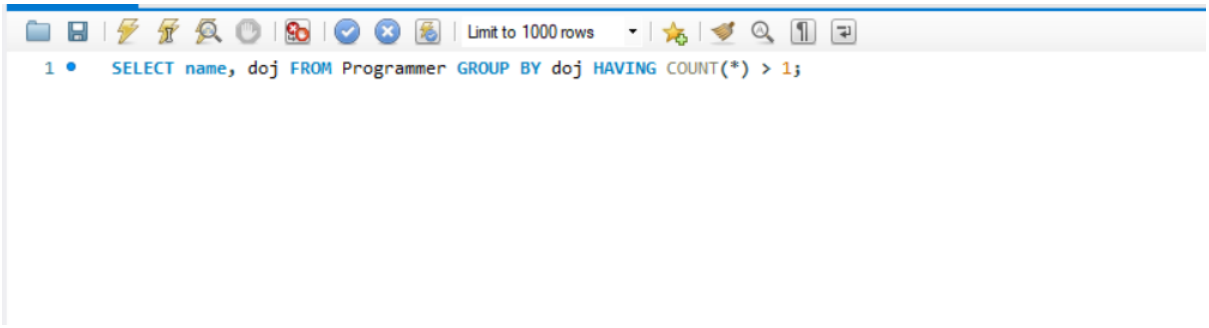
13) What is the total cost of the software developed by the programmers by APPLE?

Commands:



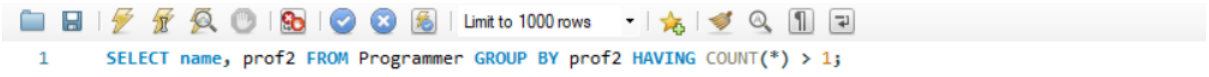
14) Who are the programmers WHO JOINED in the same day?

Commands



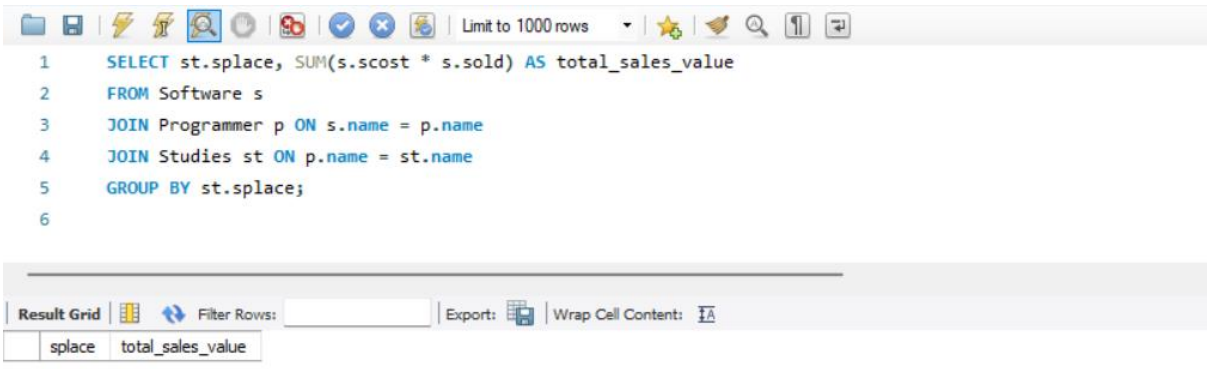
15) Who are the programmers WHO HAVE THE SAME PROF2?

Commands:



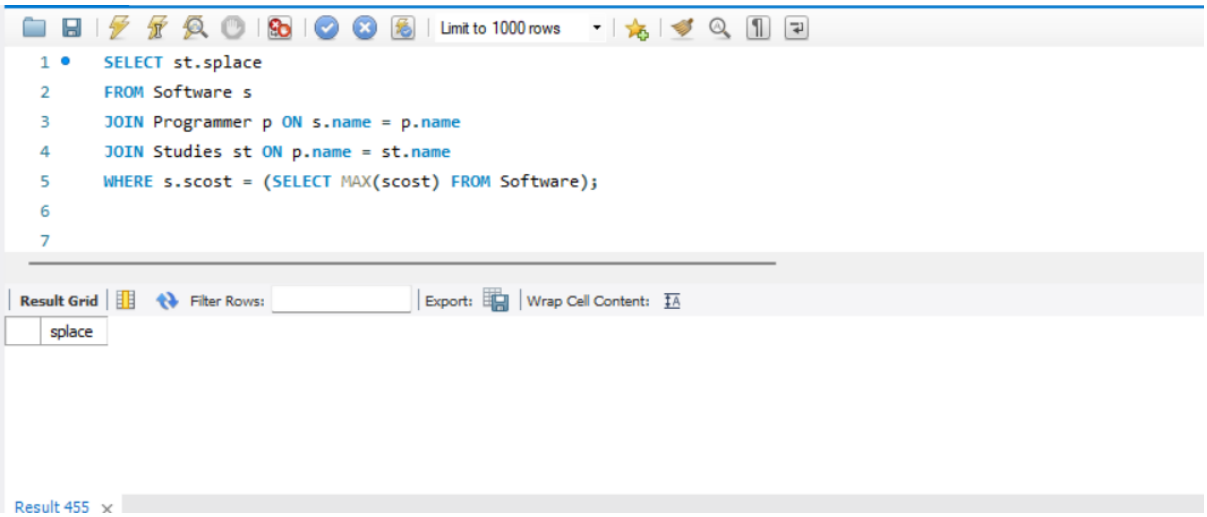
16) Display the total sales values of software, institutes-wise.

Commands:



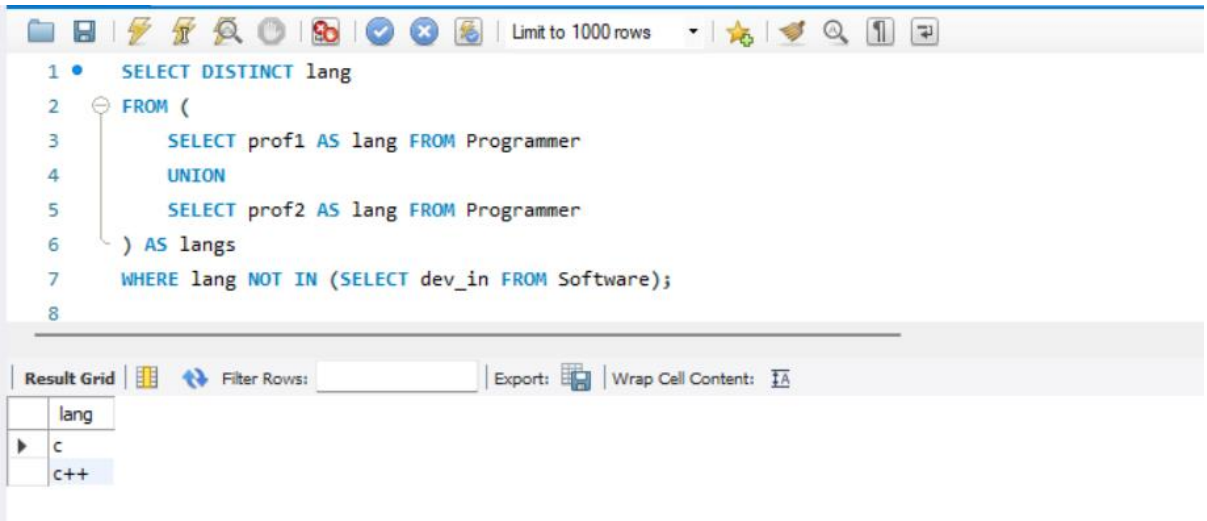
17) In which institutes did the person who developed the COSTLIEST package study?

Commands:



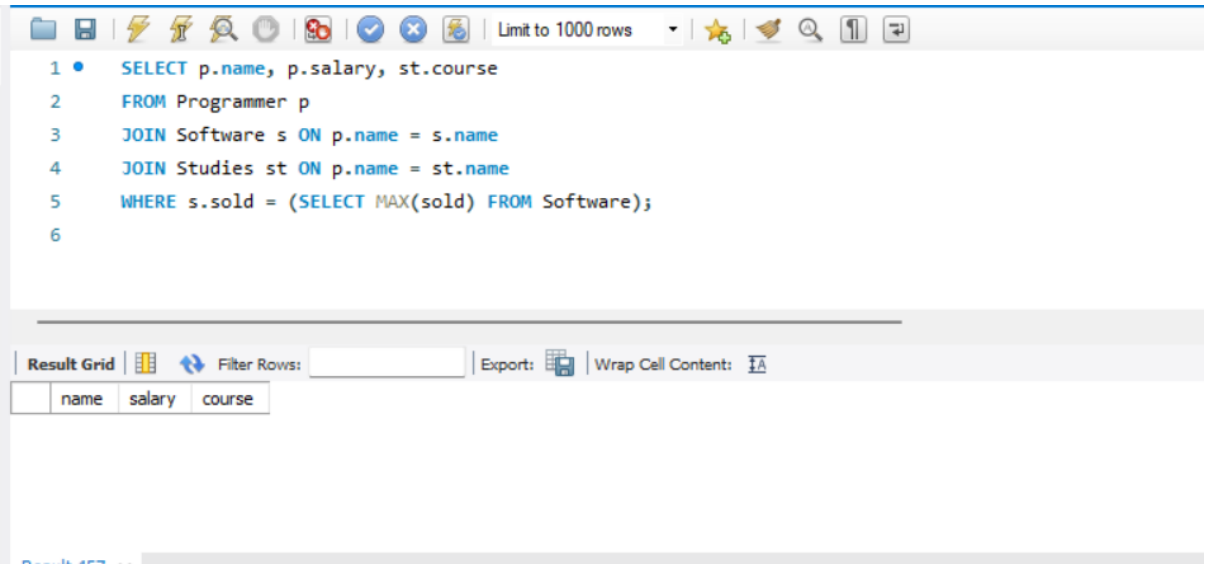
18) Which language listed in prof1 and prof2 HAS NOT BEEN used to develop any package?

Commands:



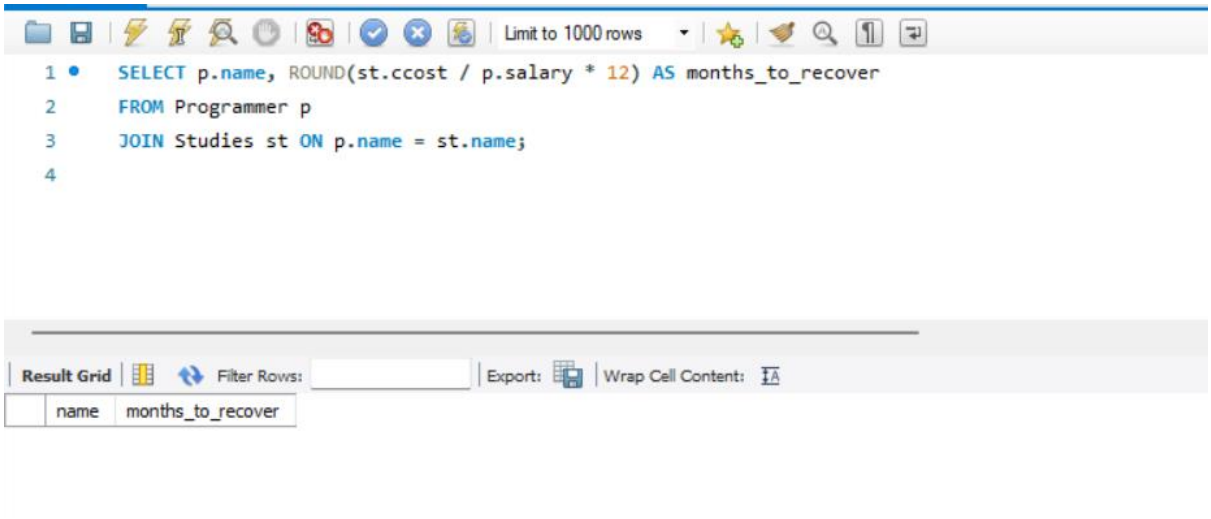
19) How much does the person WHO developed the HIGHEST selling package earn and WHAT course did he/she undergo?

Commands:



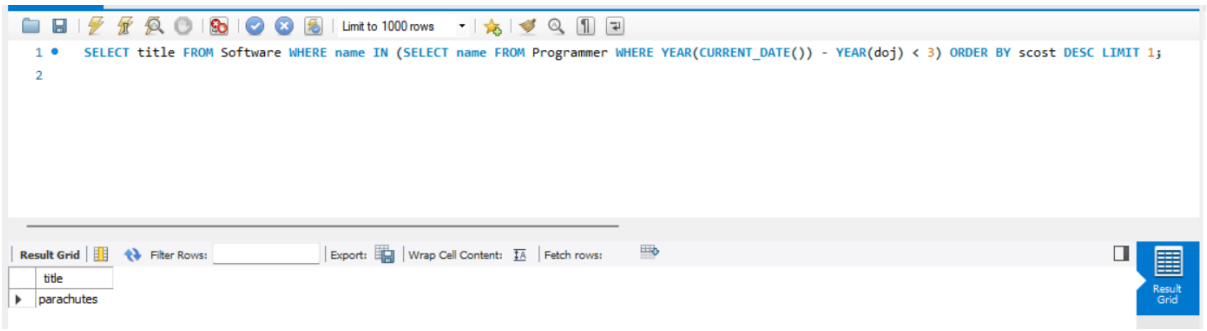
20) How many months will it take for each programmer to recover the cost of the course underwent?

Commands:



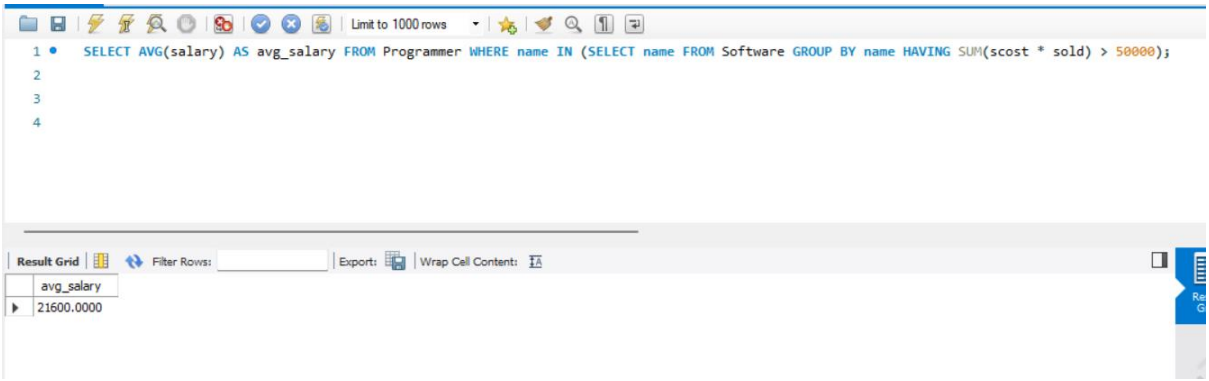
21) Which is the COSTLIEST package developed by a person with under 3 year's expenences?

Commands:



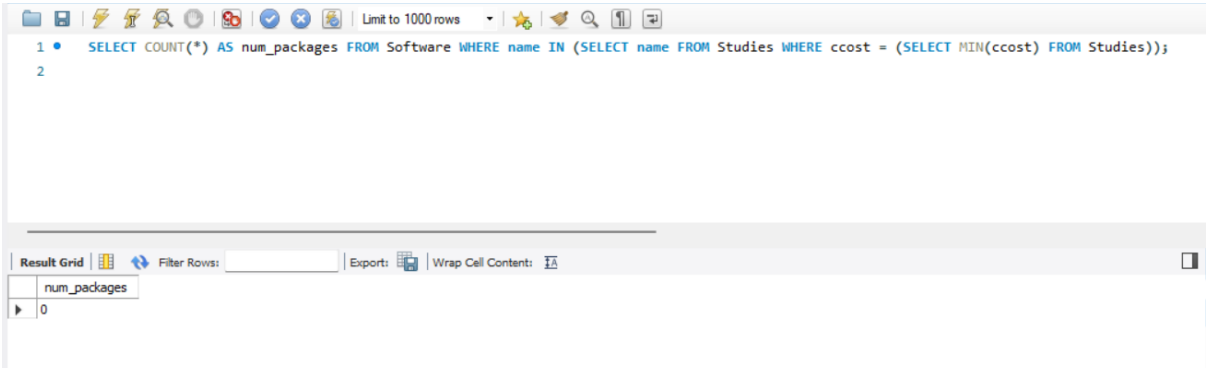
22) What is the AVERAGE salary for those WHOSE software's sales value is more than 50,000?

Commands:



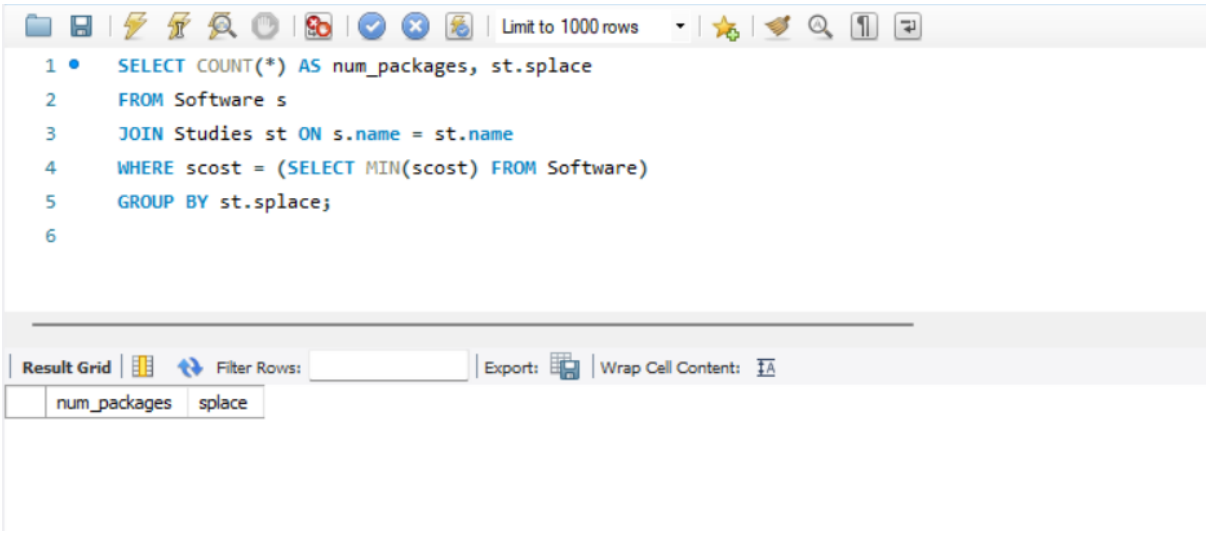
23) How many packages were developed by the students WHO studied in the institute that Charge the LOWEST course fee?

Commands:



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

Commands:



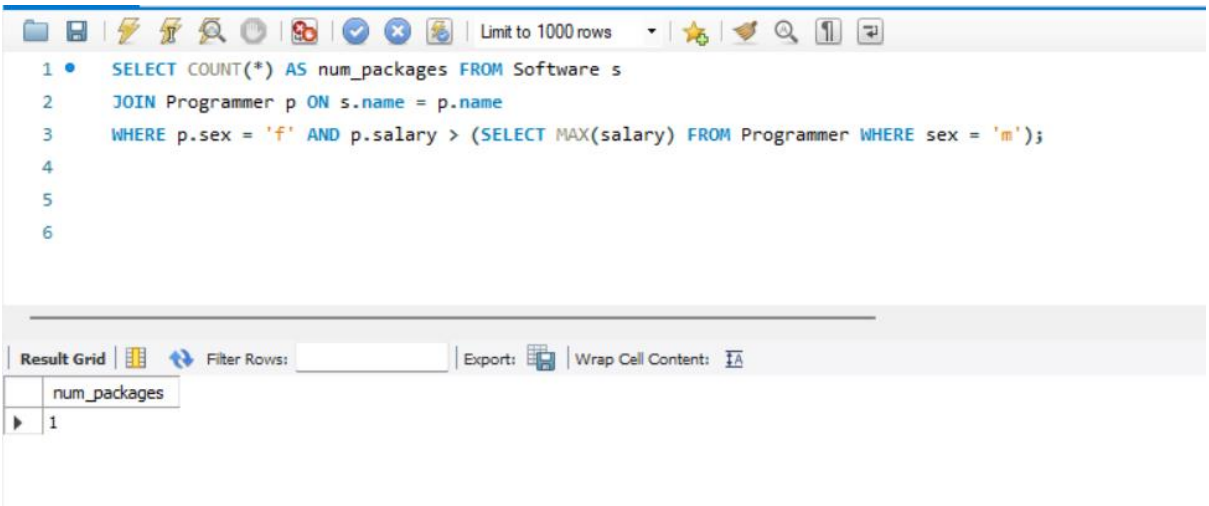
```
SELECT COUNT(*) AS num_packages, st.splace
FROM Software s
JOIN Studies st ON s.name = st.name
WHERE scost = (SELECT MIN(scost) FROM Software)
GROUP BY st.splace;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

num_packages	splace

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

Commands:



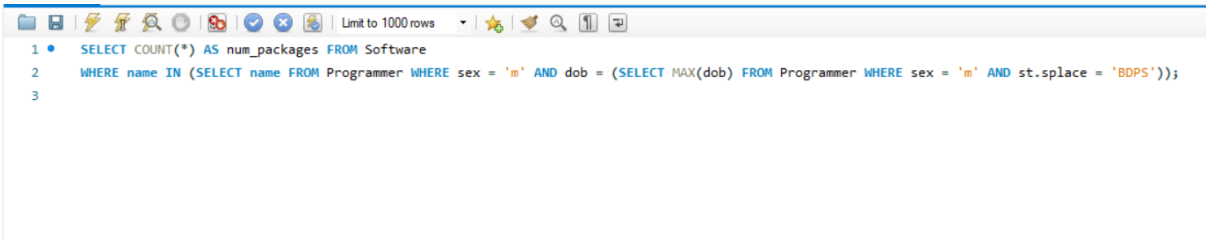
```
SELECT COUNT(*) AS num_packages FROM Software s
JOIN Programmer p ON s.name = p.name
WHERE p.sex = 'f' AND p.salary > (SELECT MAX(salary) FROM Programmer WHERE sex = 'm');
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

num_packages
1

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

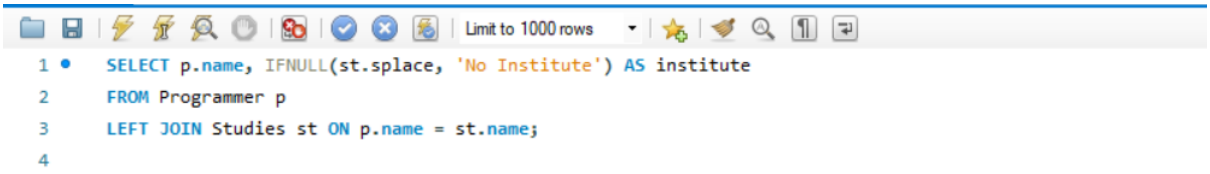
Commands:



```
SELECT COUNT(*) AS num_packages FROM Software
WHERE name IN (SELECT name FROM Programmer WHERE sex = 'm' AND dob = (SELECT MAX(dob) FROM Programmer WHERE sex = 'm' AND st.splace = 'BDPS'));
```

27) List the programmers (from software table) and institutes they studied, including those WHO DIDN'T develop any package.

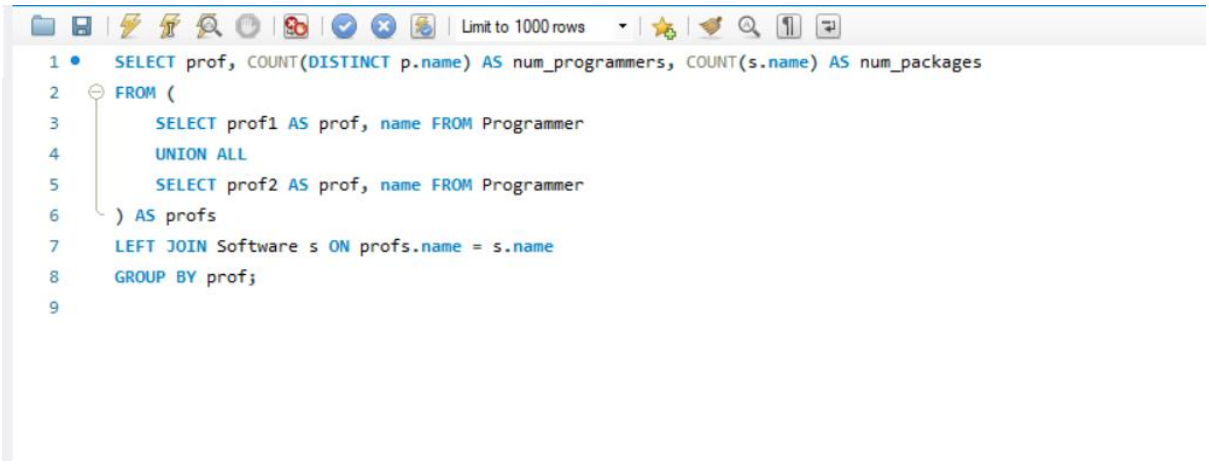
Commands:



```
SELECT p.name, IFNULL(st.splace, 'No Institute') AS institute
FROM Programmer p
LEFT JOIN Studies st ON p.name = st.name;
```

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

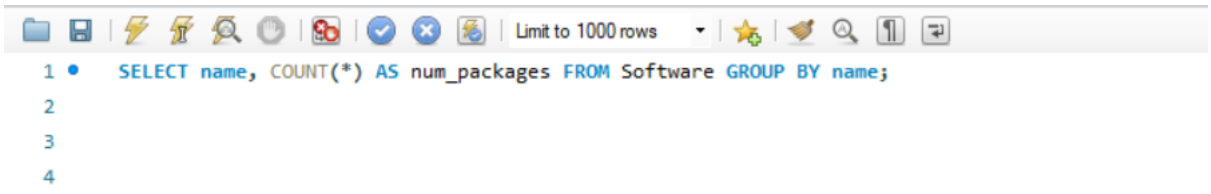
Commands:

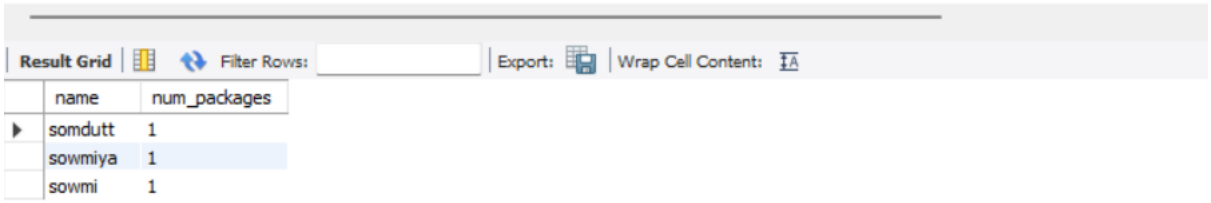


```
SELECT prof, COUNT(DISTINCT p.name) AS num_programmers, COUNT(s.name) AS num_packages
FROM (
    SELECT prof1 AS prof, name FROM Programmer
    UNION ALL
    SELECT prof2 AS prof, name FROM Programmer
) AS profs
LEFT JOIN Software s ON profs.name = s.name
GROUP BY prof;
```

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

Commands:

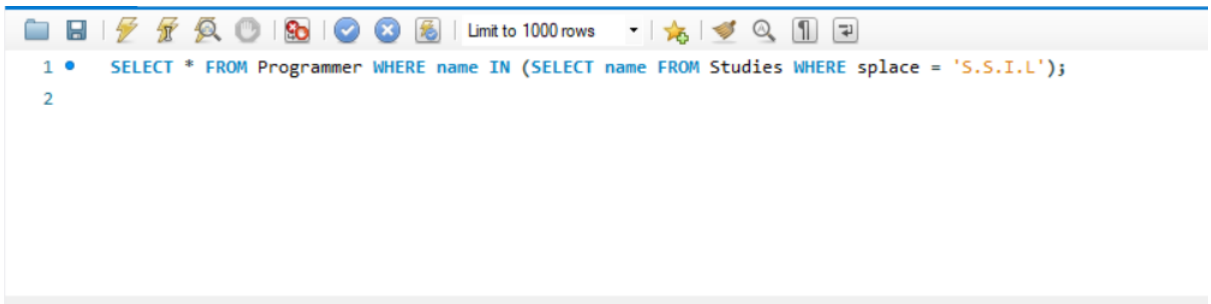


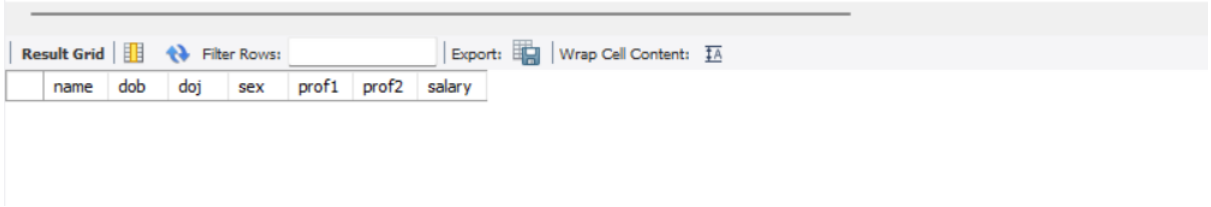


name	num_packages
somdutt	1
sowmiya	1
sowmi	1

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

Commands:





name	dob	doj	sex	prof1	prof2	salary