EXPERIMENT- 6

Implement Aggregate Functions, Group by & Having Clauses, Nested, Correlated Nested, Views, Indices and DCL Commands on

PRE-LAB

1. Discuss about GRANT, REVOKE and SYNONYM

DBMS Practical 6 19003187

1. (i) Grant
command used to provide access or privileges on the database objects to the users

(ii) REVOKE
command removes user access rights or privileges to the dabaxe objects.

(iii) SYNONYM
command allows you to create a synonym which is an alternative name for a database objects.

2. Give the differences between AVERAGE and ROUND commands?

2. AVERAGE function used to find out the average of a field in various records.

syntax AVG (expression)

ROUND function is used to round a number to a specified precision

syntax ROUND (expression, [decimal place])

3. What is the use of VIEW statement in SQL?

190031187

3. View can be created using tables of same database or different database. It is used to implement the security mechanism in the SQL.

4. Discuss about any 5 aggregate functions.

4. (i) AVG : calculates avg of set of values
(ii) COUNT : counts rows in a specified table.
(iii) MIN : gives the minimum value in a set of values.
(iv) MAX : gives the maximum value in a set of values.
(v) SUM : calculates the sum of values

5.What do you mean by a nested query in SQL?

5. Nested query is a query within another SQL query and embedded within the WHERE clause

6. What are the pattern matching operators that can be used in mySQL?

6. MYSQL provides standard SQL pattern matching as well as a form of pattern matching based on extended regular expressions similar to those used by UNIX utilities such as vi, grep, and sed.

7.Write a SQL Query to display the Current Date?

7. SELECT date_format (CURDATE(), '%w %D %M %Y %T');

9. Display the structure of the table?

9. The sthucture of the table can be viewed by using the command:-

DESCRIBE TABLE_NAME

10.What is meant by aliasing in SQL?

10- Aliasing are the temporary names given to table or column for the purpose of a particular SQL query.

8. Discuss about any 5 Character Manipulation functions?

8- (i) LOWER :- The functions converts alpha character values to lowercase

syntax LOWER(SQL course)

(ii) UPPER :- This function converts alpha character values to Uppercase

syntax UPPER (SQL Course)

(iii) LENGTH :- This function returns length of the input string. If the input string is NULL the Length function returns NULL and not zero.

syntax LENGTH (column | Expression)

(iv) INSERT :- This function returns numeric position of a character or a string in a given string

syntax INSERT (column | Expression, 'string', [M], [N])

(v) CONCAT :- This function always append string 2 to the end of string1.

CONCAT ('string1', 'string2');

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POST-LAB

Worker

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
001	Monika	Arora	100000	2014-02-20 09:00:00	HR
002	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
003	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
004	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
005	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
006	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
007	Satish	Kumar	75000	2014-01-20 09:00:00	Account
008	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

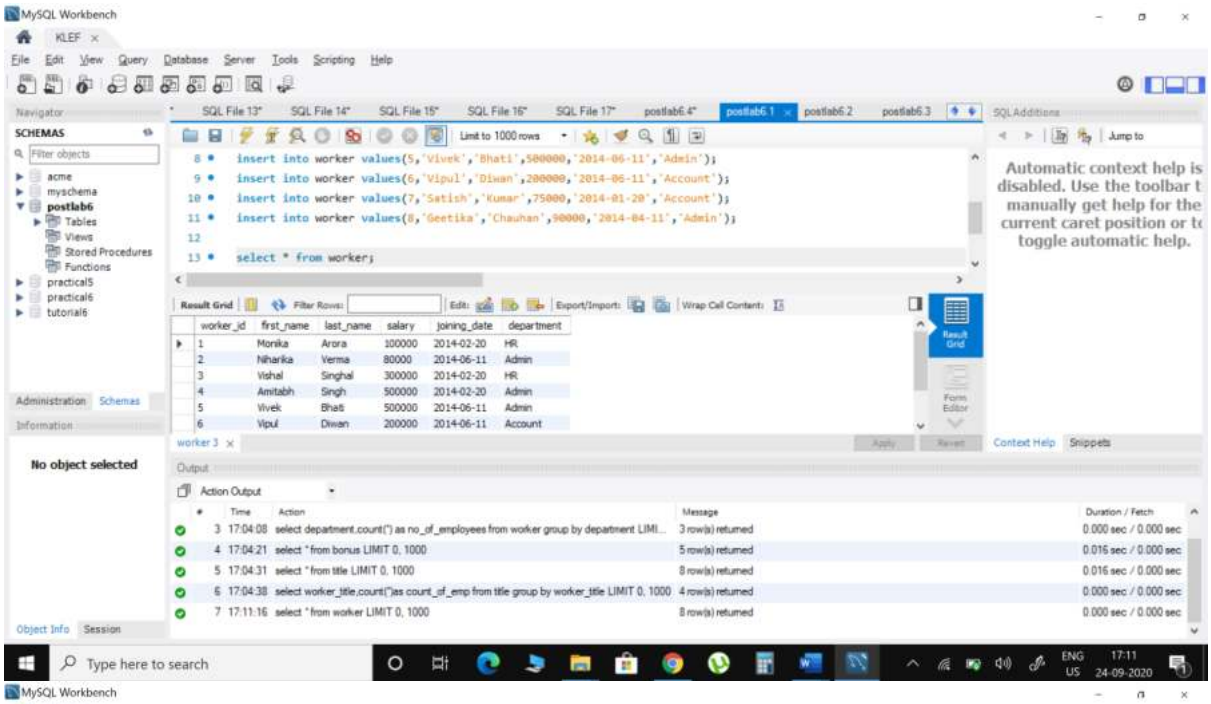
Bonus

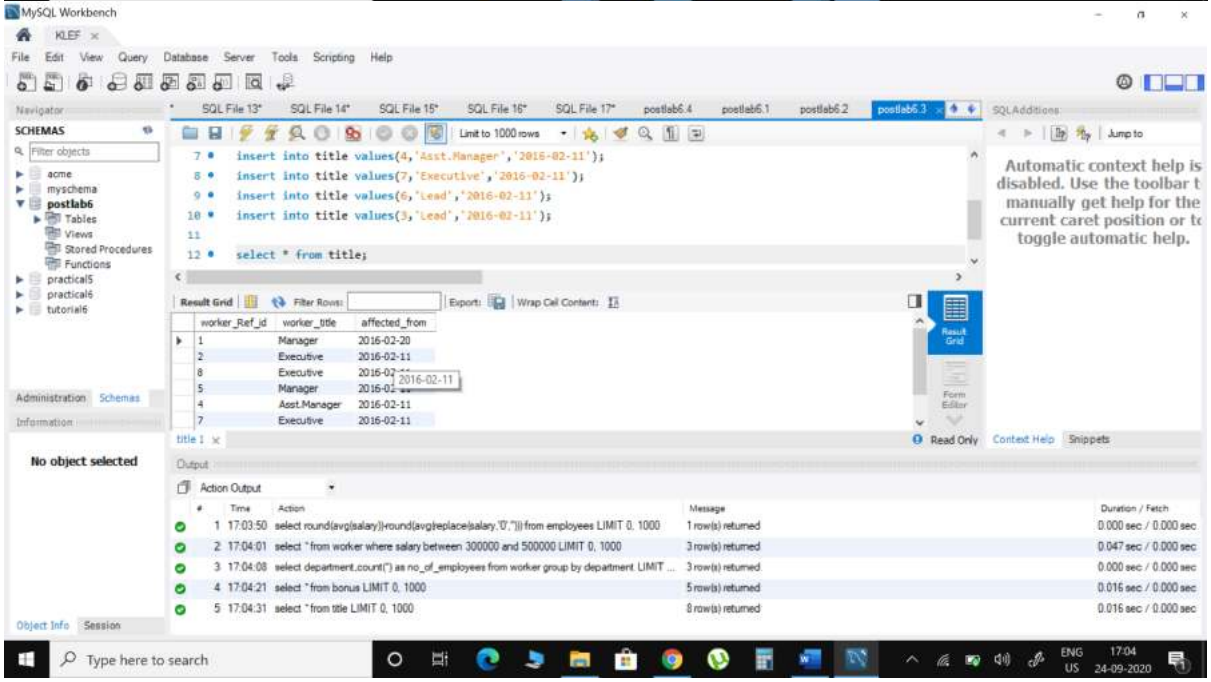
WORKER_REF_ID	BONUS_DATE	BONUS_AMOUNT
1	2016-02-20 00:00:00	5000
2	2016-06-11 00:00:00	3000
3	2016-02-20 00:00:00	4000
1	2016-02-20 00:00:00	4500
2	2016-06-11 00:00:00	3500

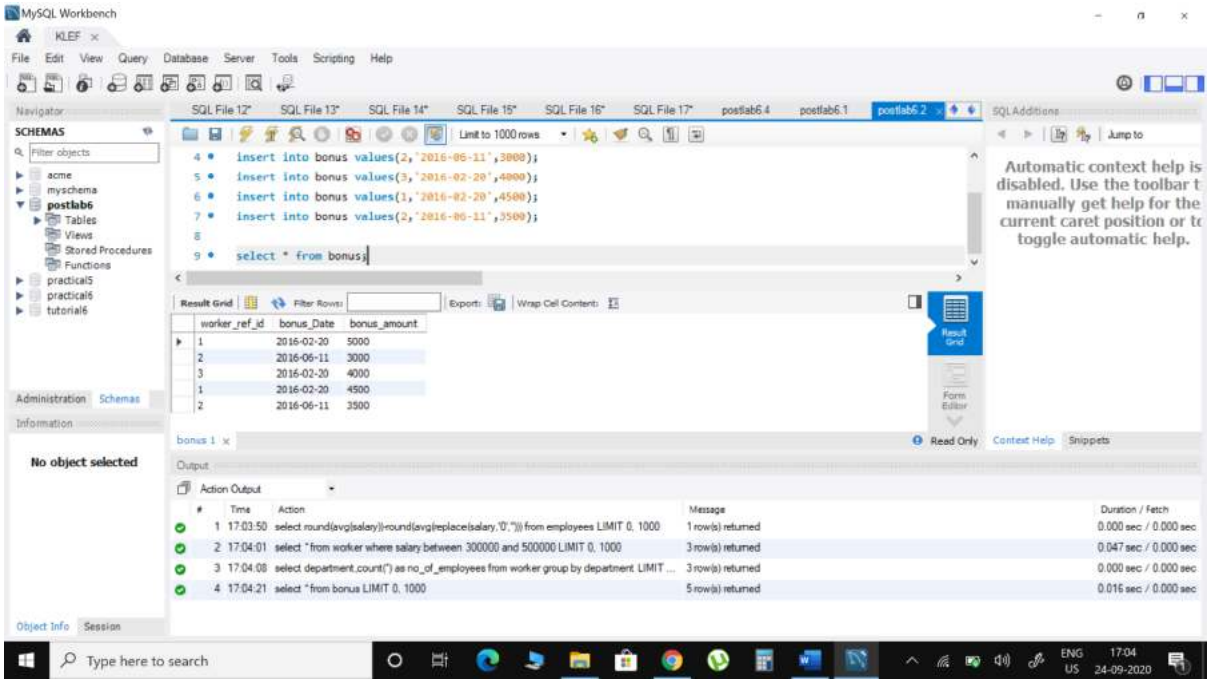
Title

WORKER_REF_ID	WORKER_TITLE	AFFECTED_FROM
1	Manager	2016-02-20 00:00:00
2	Executive	2016-06-11 00:00:00
8	Executive	2016-06-11 00:00:00
5	Manager	2016-06-11 00:00:00

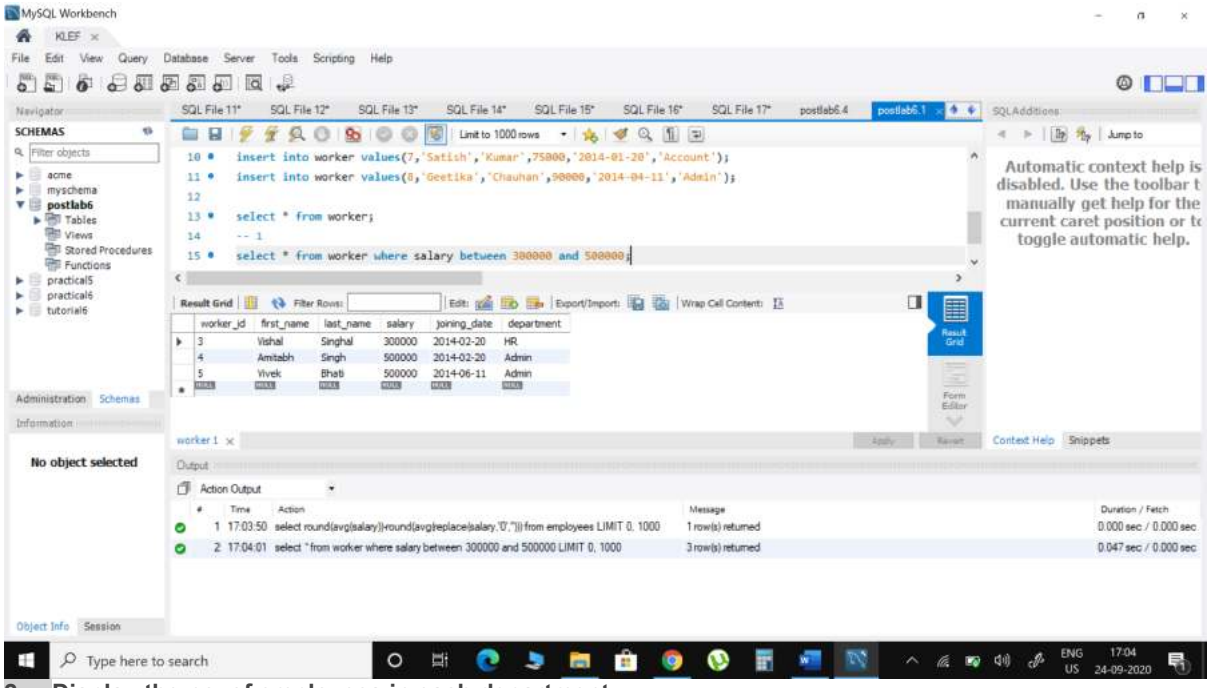
4	Asst. Manager	2016-06-11 00:00:00
7	Executive	2016-06-11 00:00:00
6	Lead	2016-06-11 00:00:00
3	Lead	2016-06-11 00:00:00



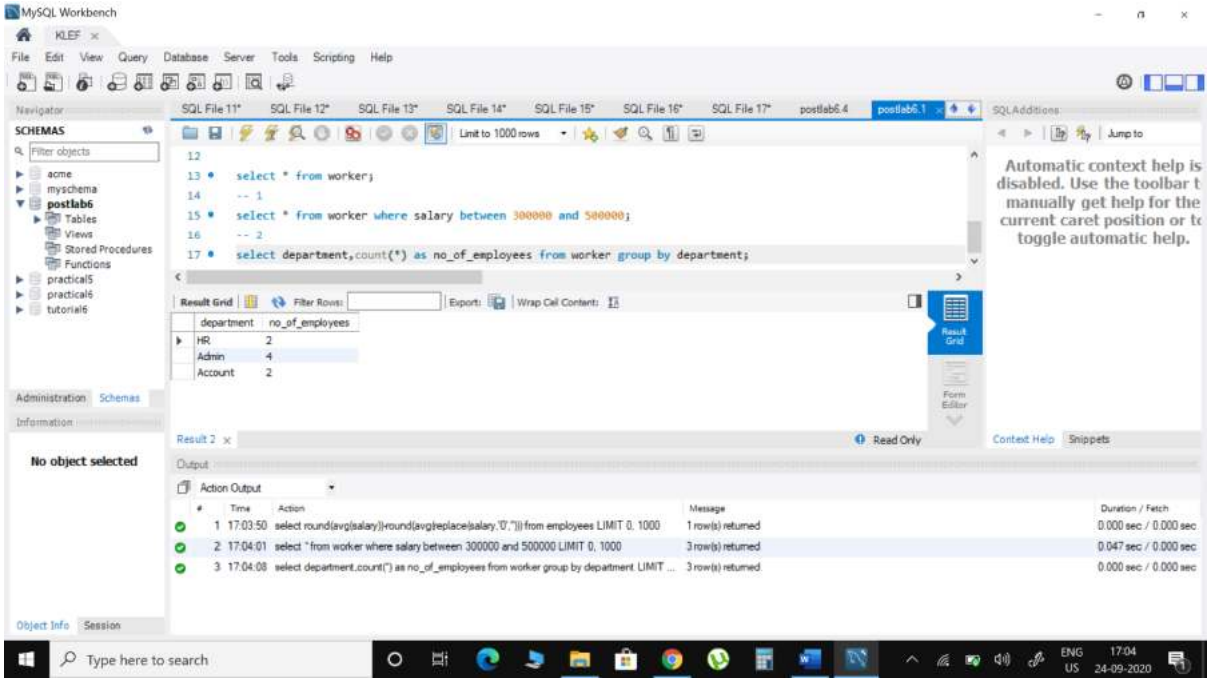



MySQL Workbench
KLEF
File Edit View Query Database Server Tools Scripting Help
SCHEMAS
acme
myschema
postlab6
Tables
Views
Stored Procedures
Functions
practical5
practical6
tutorial6
insert into bonus values(2,'2016-06-11',3000);
insert into bonus values(3,'2016-02-20',4000);
insert into bonus values(1,'2016-02-20',4500);
insert into bonus values(2,'2016-06-11',3500);
select * from bonus;
worker_ref_id bonus_Date bonus_amount
1 2016-02-20 5000
2 2016-06-11 3000
3 2016-02-20 4000
1 2016-02-20 4500
2 2016-06-11 3500
No object selected
Automatic context help is disabled. Use the toolbar t manually get help for the current caret position or tc toggle automatic help.
1 17:03:50 select round(avg(salary))-round(avg(replace(salary,'0',''))) from employees LIMIT 0, 1000 1 row(s) returned 0.000 sec / 0.000 sec
2 17:04:01 select * from worker where salary between 300000 and 500000 LIMIT 0, 1000 3 row(s) returned 0.047 sec / 0.000 sec
3 17:04:08 select department,count(*) as no_of_employees from worker group by department LIMIT ... 3 row(s) returned 0.000 sec / 0.000 sec
4 17:04:21 select * from bonus LIMIT 0, 1000 5 row(s) returned 0.016 sec / 0.000 sec
Type here to search
ENG US 17:04 24-09-2020

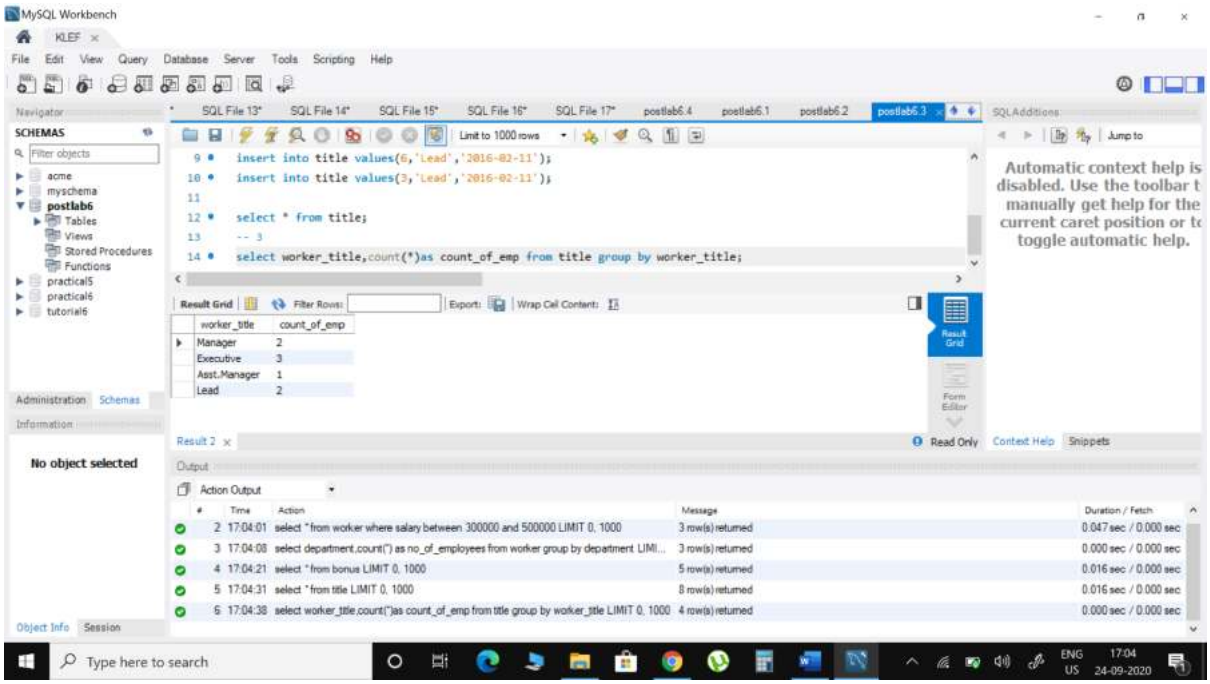
1 **Create a SQL query to display employeesdetailswhose salary is greater than 30000 and less than 50000**



2 **Display the no. of employees in each department**



3 Display the count of employees with same designation in an organization



4 Problem:

Sharon was tasked with calculating the average monthly salaries for all employees in the **EMPLOYEES** table, but did not realize her keyboard's key was broken until after completing the calculation. She wants your help finding the difference between her miscalculation (using salaries with any zeroes removed), and the actual average salary.Write a query calculating the amount of error (i.e.: average monthly salaries), and round it up to the next integer.

Input Format

The **EMPLOYEES** table is described as follows:

Column	Type
ID	Integer
Name	String
Salary	Integer

Note: *Salary* is measured in dollars per month and its value is .

Sample Input

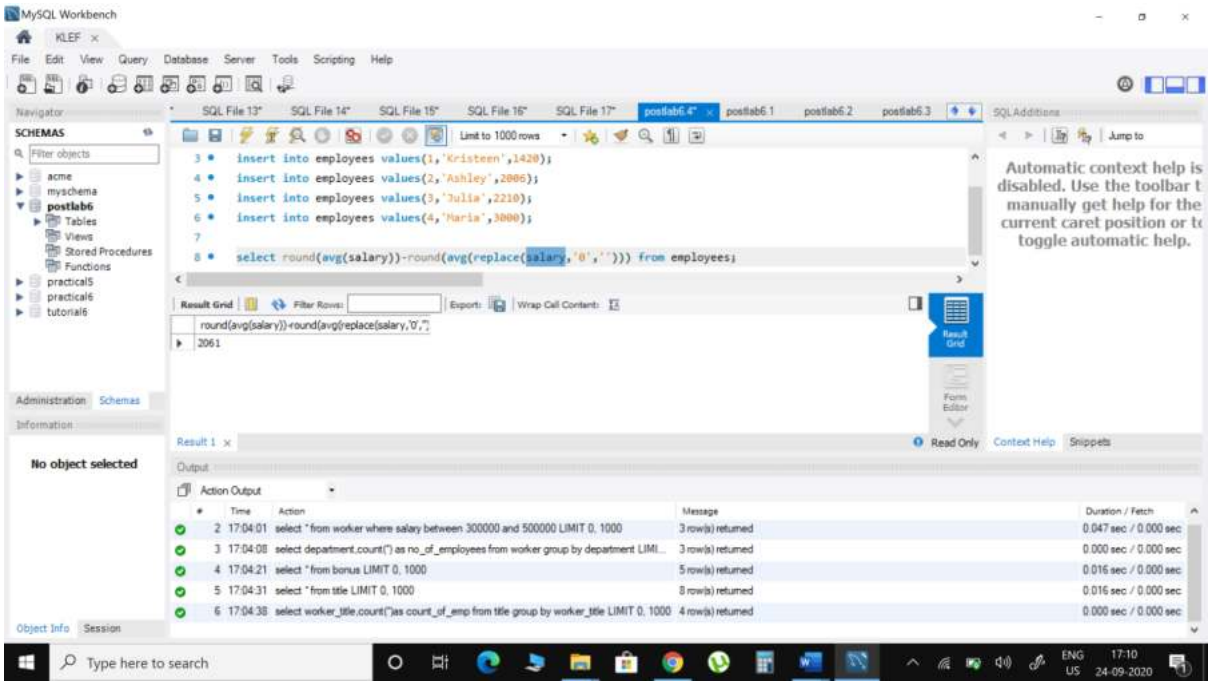
ID	Name	Salary
1	Kristeen	1420
2	Ashley	2006
3	Julia	2210
4	Maria	3000

Sample Output

2061

Explanation

The table below shows the salaries *without zeroes* as they were entered by Samantha:

ID	Name	Salary
1	Kristeen	142
2	Ashley	26
3	Julia	221
4	Maria	3

Sharon computes an average salary of 98.00. The *actual* average salary is 2195.00 . The resulting error between the two calculations is 2195.00-98.00=2061.00 which, when rounded to the next integer, is 2061 .