SUB-QUERIES

EXP.NO:9 **DATE:**

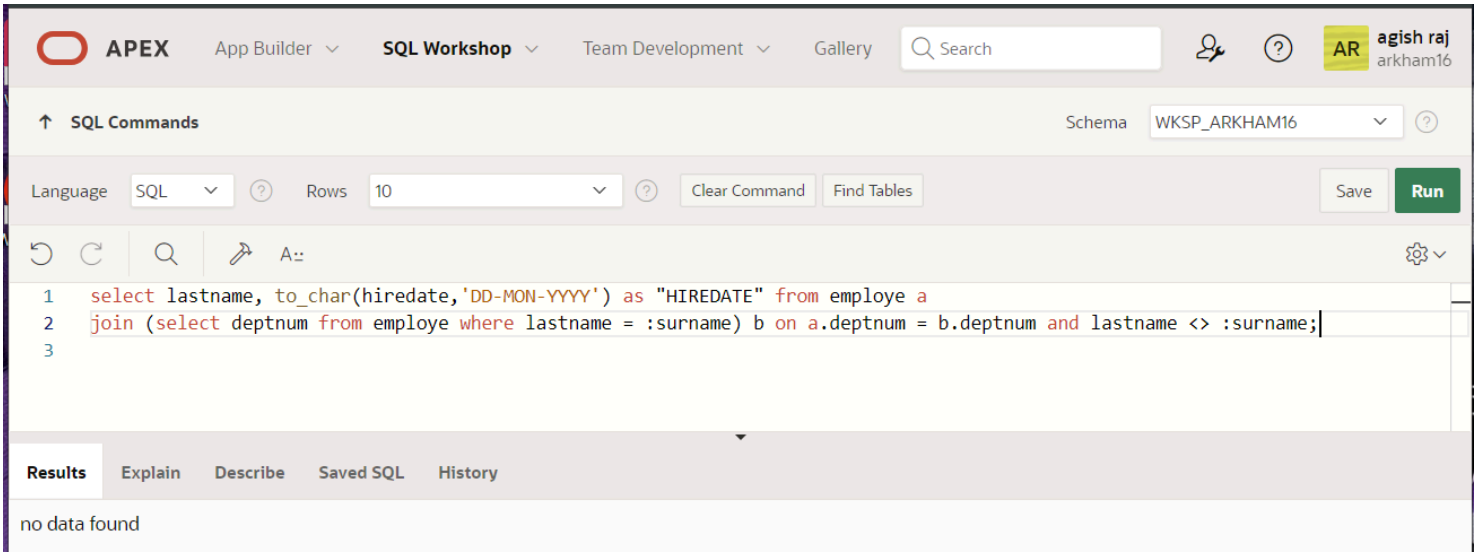
Find the Solution for the following:

1. The HR department needs a query that prompts the user for an employee last name. The query then displays the last name and hire date of any employee in the same department as the employee whose name they supply (excluding that employee). For example, if the user enters Zlotkey, find all employees who work with Zlotkey (excluding Zlotkey).

QUERY:

```
select lastname, to_char(hiredate,'DD-MON-YYYY') as "HIREDATE" from employe a
join (select deptnum from employe where lastname = :surname) b on a.deptnum = b.deptnum
and lastname <> :surname;
```

OUTPUT:



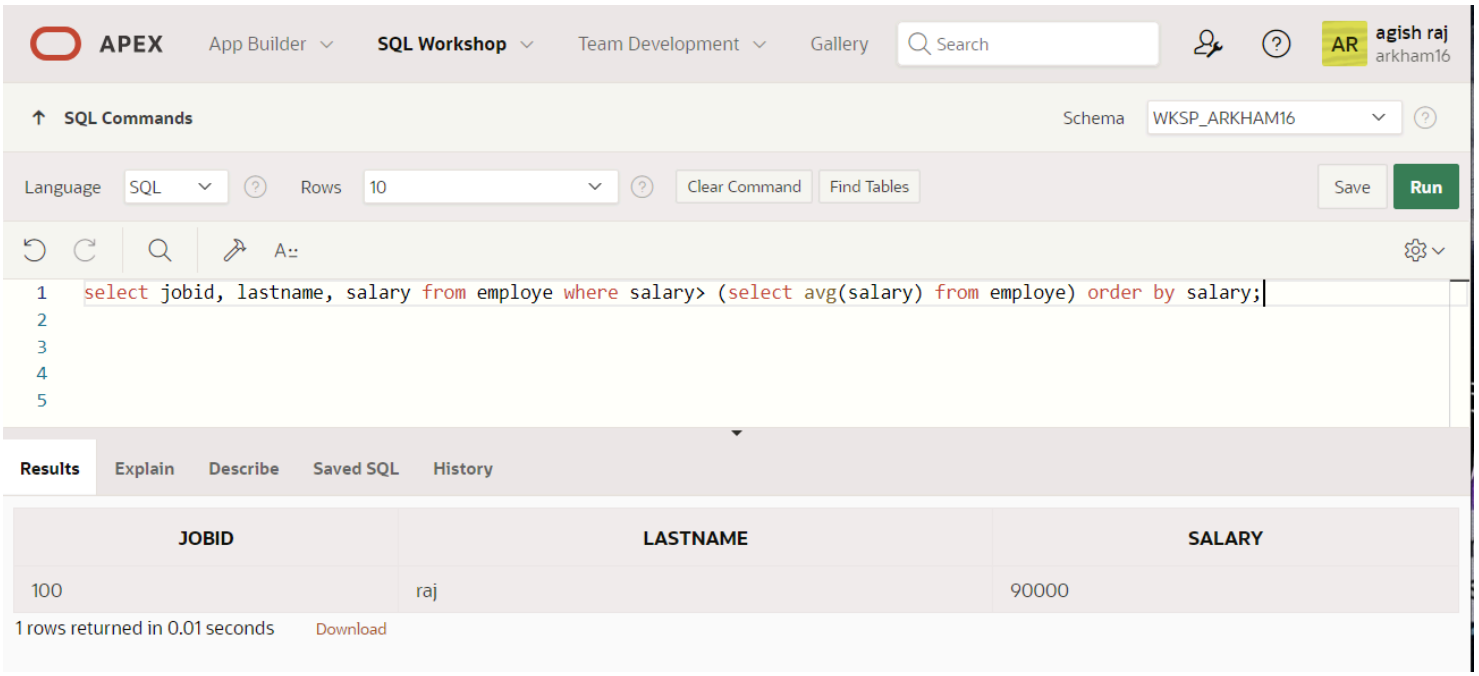
2. Create a report that displays the employee number, last name, and salary of all employees who earn more than the average salary. Sort the results in order of ascending salary.

QUERY:

select jobid, lastname, salary from employe where salary>

(select avg(salary) from employe) order by salary;

OUTPUT:

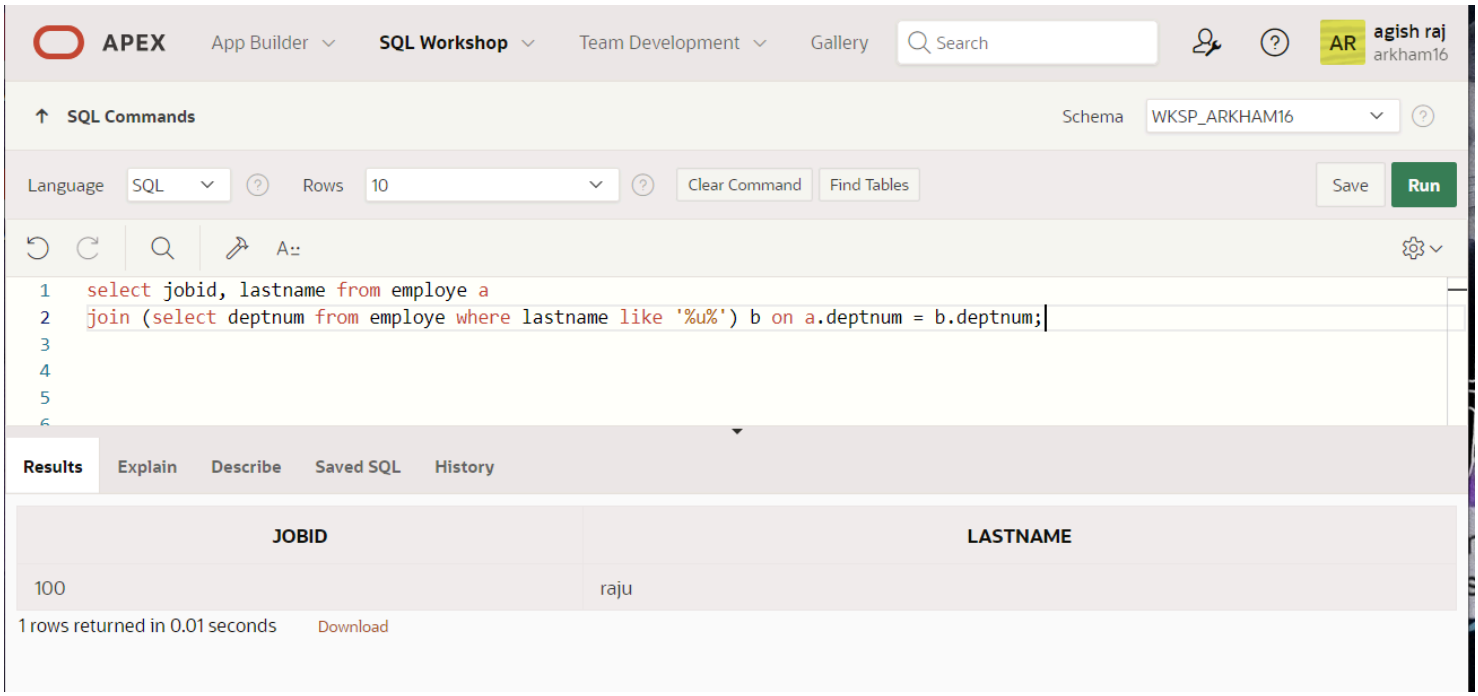


3. Write a query that displays the employee number and last name of all employees who work in a department with any employee whose last name contains a u.

QUERY:

```
select jobid, lastname from employe a
join (select deptnum from employe where lastname like '%u%') b on a.deptnum = b.deptnum;
```

OUTPUT:



4. The HR department needs a report that displays the last name, department number, and job ID of all employees whose department location ID is 1700.

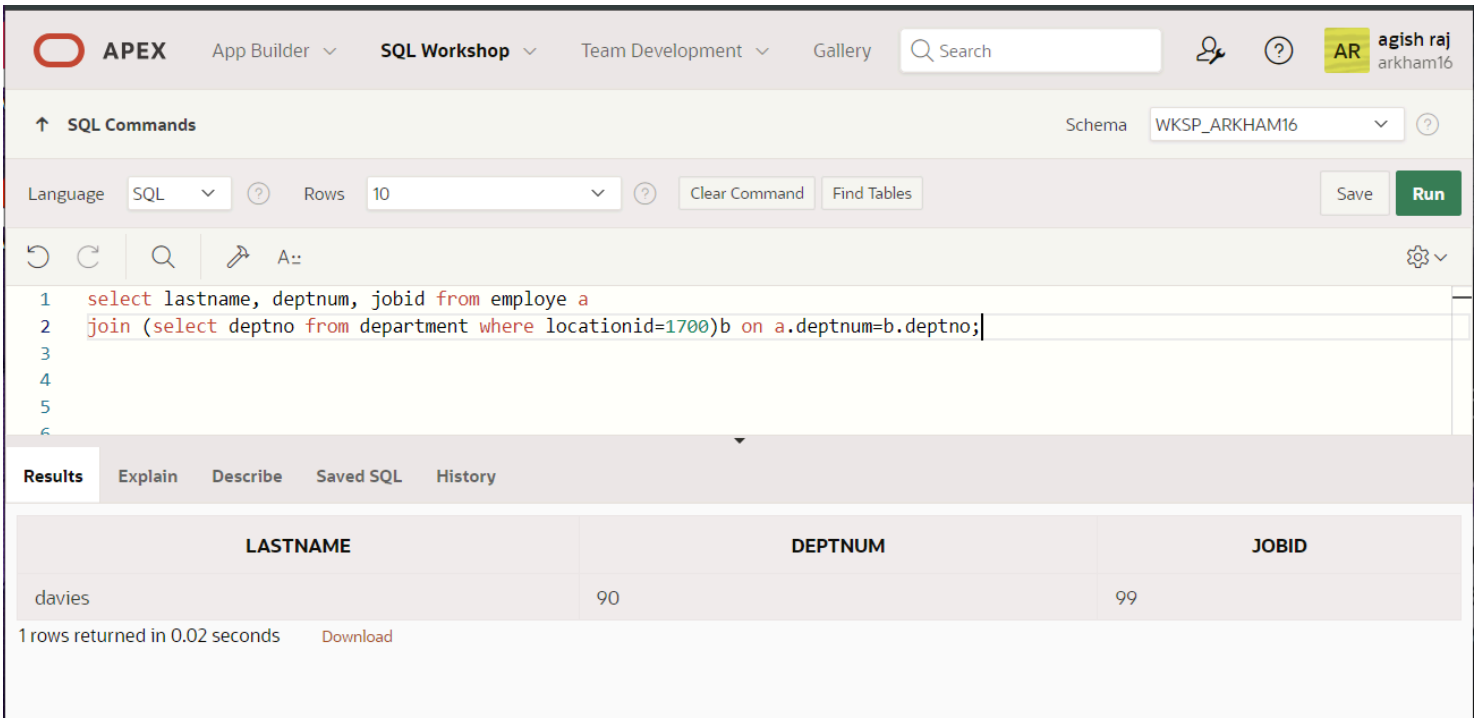
QUERY:

select lastname, deptnum, jobid from employe a

join (select deptno from department where locationid=1700)b on

a.deptnum=b.deptno;

OUTPUT:

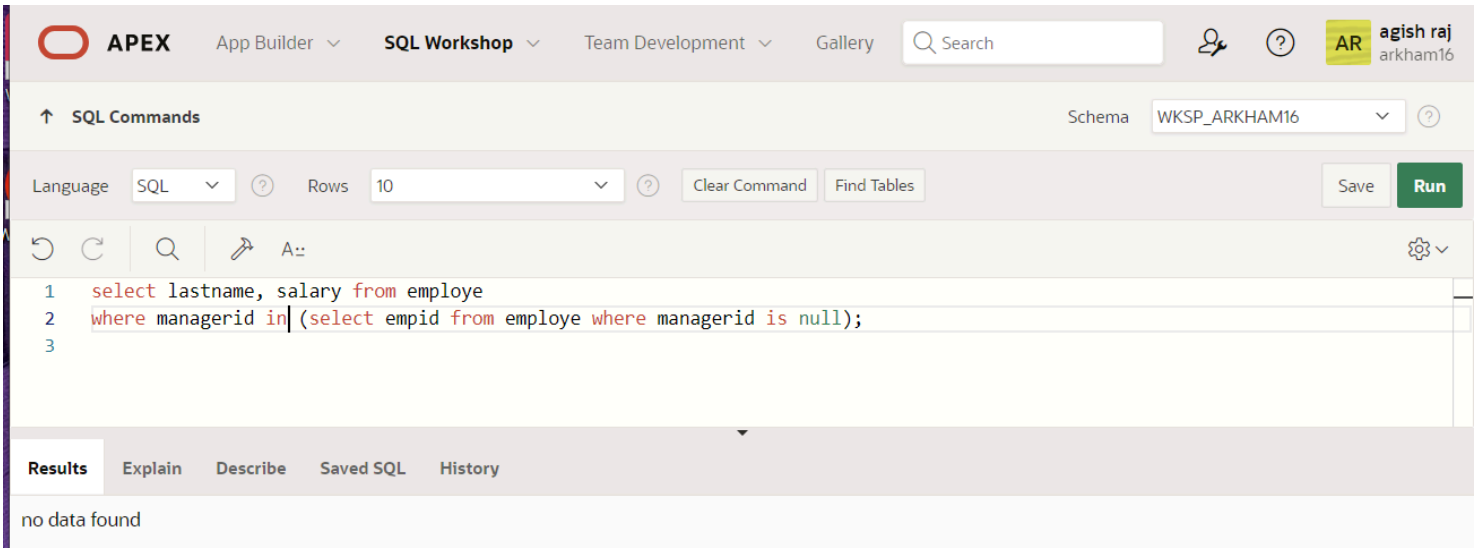


5. Create a report for HR that displays the last name and salary of every employee who reports to King.

QUERY:

```
select lastname, salary from employe
where managerid in (select empid from employe where managerid is null);
```

OUTPUT:

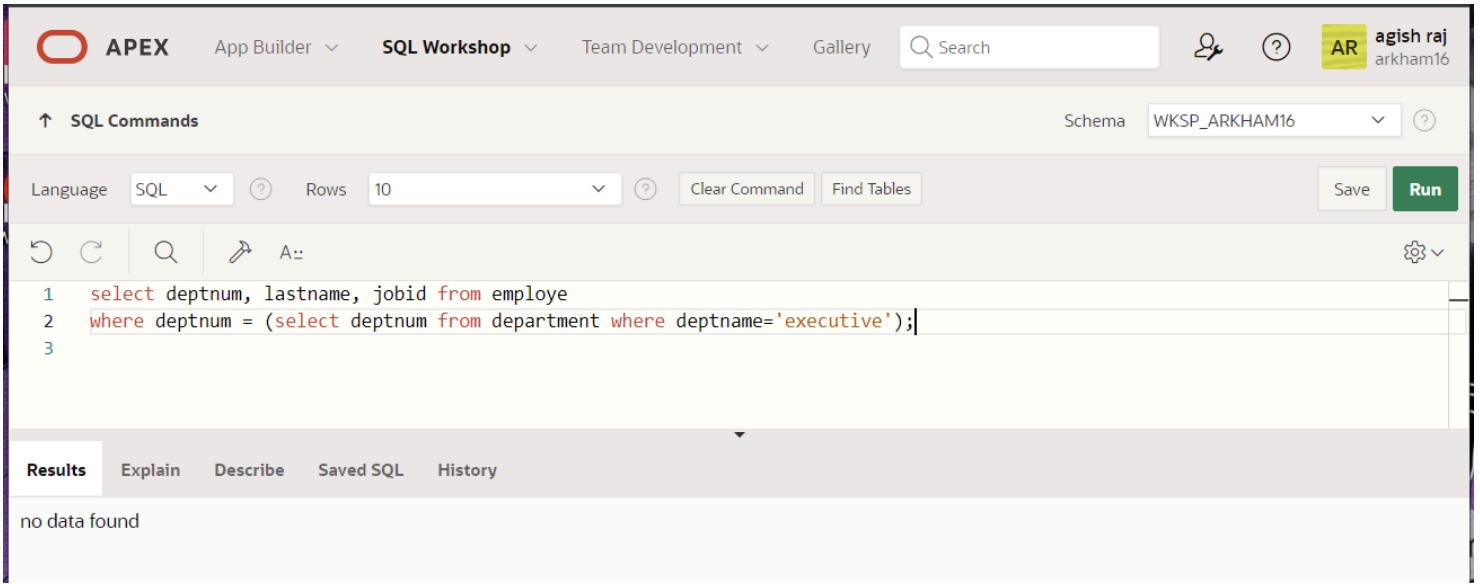


6. Create a report for HR that displays the department number, last name, and job ID for every employee in the Executive department.

QUERY:

```
select deptnum, lastname, jobid from employe
where deptnum = (select deptnum from department where deptname='executive');
```

OUTPUT:

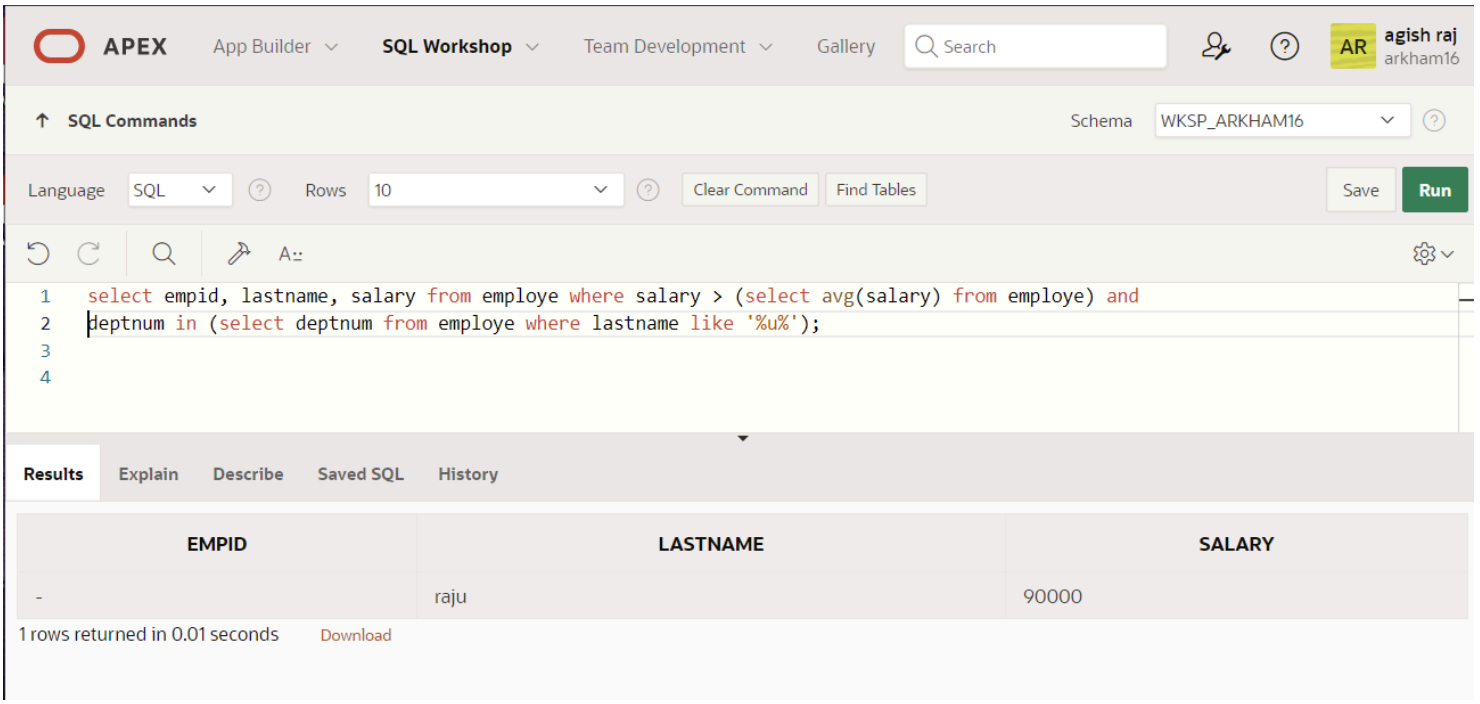


7. Modify the query 3 to display the employee number, last name, and salary of all employees who earn more than the average salary and who work in a department with any employee whose last name contains a u.

QUERY:

```
select empid, lastname, salary from employe where salary > (select avg(salary) from employe)
and deptnum in (select deptnum from employe where lastname like '%u%');
```

OUTPUT:



Evaluation Procedure	Marks Awarded
Query(5)	
Execution (5)	
Viva(5)	
Total (15)	
Faculty Signature	

RESULT:

EXERCISE 12
PRACTICE QUESTIONS

Intro to Constraints; NOT NULL and UNIQUE Constraints

Global Fast Foods has been very successful this past year and has opened several new stores. They need to add a table to their database to store information about each of their store's locations. The owners want to make sure that all entries have an identification number, date opened, address, and city and that no other entry in the table can have the same email address. Based on this information, answer the following questions about the global_locations table. Use the table for your answers.

Global Fast Foods global_locations Table

NAME	TYPE	LENGTH	PRECISION	SCALE	NULLABLE	DEFAULT
Id						
name						
date_opened						
address						
city						
zip/postal code						
phone						
email						
manager_id						
Emergency contact						

1. What is a "constraint" as it relates to data integrity?

   Database can be as reliable as the data in it, and database rules are implemented as Constraint to maintain data integrity.

2. What are the limitations of constraints that may be applied at the column level and at the table level?

   - Constraints referring to more than one column are defined at Table Level
   - NOT NULL constraint must be defined at column level as per ANSI/ISO SQL standard.

3. Why is it important to give meaningful names to constraints?

   - If a constraint is violated in a SQL statement execution, it is easy to identify the cause with user-named constraints.
   - It is easy to alter names/drop constraint.