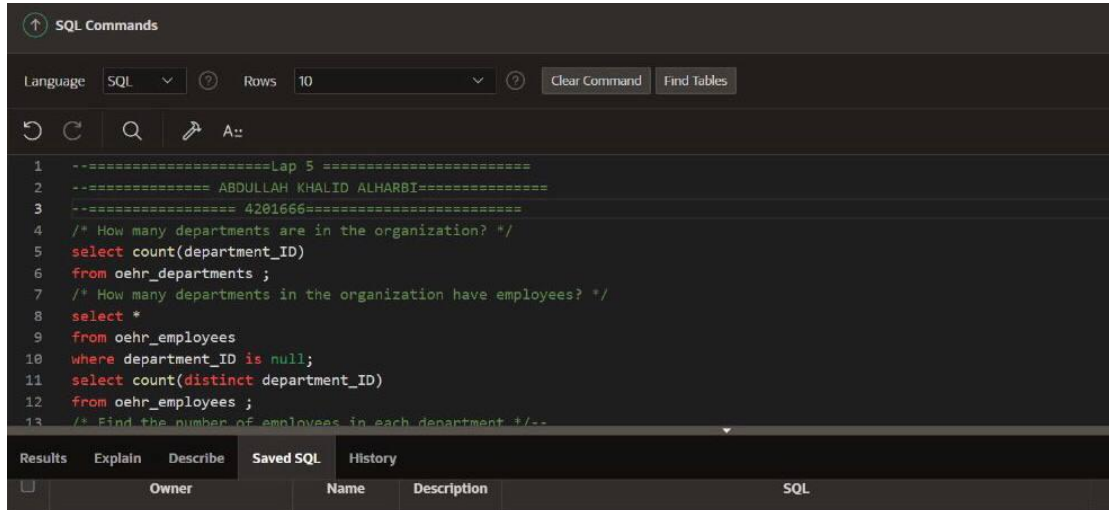


Sname: Abdullah khalid Alahrbi ID:4201666
SECTION:IS7A

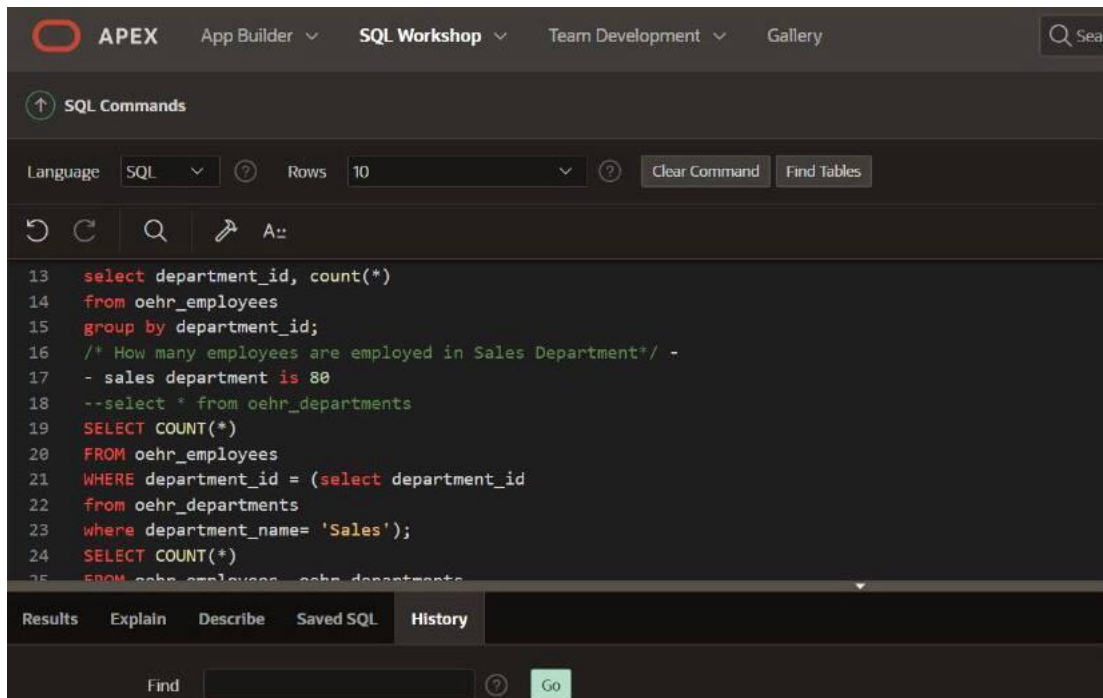
LAB 5:



The screenshot shows the SQL Workshop interface. The top bar includes 'SQL Commands', 'Language: SQL', 'Rows: 10', and buttons for 'Clear Command' and 'Find Tables'. The main area contains a SQL script with the following content:

```
1  -----Lap 5 -----
2  ----- ABDULLAH KHALID ALHARBI-----
3  ----- 4201666-----
4  /* How many departments are in the organization? */
5  select count(department_ID)
6  from oehr_departments ;
7  /* How many departments in the organization have employees? */
8  select *
9  from oehr_employees
10 where department_ID is null;
11 select count(distinct department_ID)
12 from oehr_employees ;
13 /* Find the number of employees in each department */--
```

Below the script, there are tabs for 'Results', 'Explain', 'Describe', 'Saved SQL', and 'History'. The 'Results' tab is selected, showing a table with columns: Owner, Name, Description, and SQL.



The screenshot shows the APEX SQL Workshop interface. The top bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. The main area contains a SQL script with the following content:

```
13 select department_id, count(*)
14 from oehr_employees
15 group by department_id;
16 /* How many employees are employed in Sales Department? -
17 - sales department is 80
18 --select * from oehr_departments
19 SELECT COUNT(*)
20 FROM oehr_employees
21 WHERE department_id = (select department_id
22 from oehr_departments
23 where department_name= 'Sales');
24 SELECT COUNT(*)
25 FROM oehr_employees oehr_departments
```

Below the script, there are tabs for 'Results', 'Explain', 'Describe', 'Saved SQL', and 'History'. The 'Results' tab is selected, showing a table with columns: Find, Go.

↑ SQL Commands

Language SQL Rows 10 Clear Command Find Tables

↶ ↷ 🔍 ↵ A::

```
25 FROM oehr_employees, oehr_departments
26 WHERE oehr_employees.department_id= oehr_departments.department_id
27 AND department_name= 'Sales';
28 /* Find the average salary, the maximum salary, the minimum salary, a
29 nd the sum of the paid salaries in the organization of all employees.
30 */
31 SELECT AVG(salary), MAX(salary), MIN(salary), SUM(salary)
32 FROM oehr_employees;
33 /* For each department, retrieve the department name and the average
34 salary and the highest salary paid to the employees in that departmen
35 t. Sort the result based on the department name alphabetically..*/
36 -- the order is by default
```

Results Explain Describe Saved SQL History

↑ SQL Commands

Language SQL Rows 10 Clear Command Find Tables

↶ ↷ 🔍 ↵ A::

```
37 select department_name, AVG(Salary), max(salary)
38 from oehr_employees , oehr_departments
39 where oehr_employees.department_id= oehr_departments.department_id
40 group by department_name
41 order by department_name;
42 /* Find the average salary, the maximum salary, the minimum salary, a
43 nd the total of paid salaries in the organization for the employees w
44 ho work as representatives ( HINT: job_id : MK_REP, HR_REP, PR_REP) */
45
46 SELECT AVG(salary), MAX(salary), MIN(salary), SUM(salary)
47 FROM oehr_employees
48 WHERE job_id LIKE '%REP%';
```

Results Explain Describe Saved SQL History

APEX

App Builder

SQL Workshop

Team Development

Gallery

SQL Commands

Language

SQL

Rows

10

Clear Command

Find Tables

A::

48 WHERE job_id LIKE '%REP%';

49 /*Find the earliest hired employee(s) and the most recently hired emp

50 loyee(s) in the organization.*/

51 SELECT *

52 FROM oehr_employees e

53 WHERE hire_date = (SELECT max(hire_date) FROM oehr_employees) or

54 hire_date = (SELECT min(hire_date) FROM oehr_employees) ;

55 --another solution (presented as no1)

56 SELECT max(hire_date),min(hire_date)

57 FROM oehr_employees e

58 /*Find the highest salary paid in each department for those departmen

59 ts in which the highest-paid salary is more than 10000. */

60 SELECT department_id, MAX(salary)

Results

Explain

Describe

Saved SQL

History

APEX

App Builder

SQL Workshop

Team Development

Gallery

SQL Commands

Language

SQL

Rows

10

Clear Command

Find Tables

A::

60 SELECT department_id, MAX(salary)

61 FROM oehr_employees

62 GROUP BY department_id

63 HAVING MAX(salary)>10000 ;

64 /*Which department has the highest average salary?*/

65 SELECT department_id, AVG(salary)

66 FROM oehr_employees

67 GROUP BY department_id

68 having avg(salary) = (SELECT max(AVG(salary))

69 FROM oehr_employees

70 GROUP BY department_id);

71 /*Retrieve the Full name of the employee along with the full name of

72 his/her manager*/-- maybe not too much

Results

Explain

Describe

Saved SQL

History

↑ SQL Commands

Language SQL ? Rows 10 ? Clear Command Find Tables

↶ ↷ 🔍 ↵ A:

```
72 his/her manager*/* maybe not too much
73 --select * from oehr_employees
74 select E.first_name || ' ' || E.Last_name AS "Employee Full Name" , M
75 .first_name || ' ' || M.last_name AS "Manger Full Name"
76 from oehr_employees E, oehr_employees M
77 where E.manager_id = M.employee_id;
78 /* For each job position in the organization, retrieve the job title
79 and the number of employees working in that job. Order the result by
80 the job title in descending order. */
81 select job_title, count(*)
82 from OEHR_EMPLOYEES, OEHR_JOBS
83 where OEHR_EMPLOYEES.job_id = OEHR_JOBS.job_id
84 group by job_title
```

Results Explain Describe Saved SQL History

APEX App Builder ▾ SQL Workshop ▾ Team Development ▾ Gallery

↑ SQL Commands

Language SQL ? Rows 10 ? Clear Command Find Tables

↶ ↷ 🔍 ↵ A:

```
84 group by job_title
85 order by job_title desc;
86 /*Retrive the deaprtment name and number of employees for the departm
87 ent that has the highest number of worker */
88 select department_name, count(*)
89 from OEHR_EMPLOYEES, OEHR_DEPARTMENTS
90 where OEHR_EMPLOYEES.department_id = OEHR_DEPARTMENTS.department_id
91 group by department_name
92 having count(*) = (select max(count(*)) from OEHR_EMPLOYEES group by
93 department_id );
```

Results Explain Describe Saved SQL History

LAB 6:

SQL Commands

Language: SQL Rows: 10 Clear Command Find Tables

SQL Editor

```

1  ----- Lap 6 -----
2  ----- ABDULLAH KHALID ALHARBI-----
3  ----- 4201666-----
4  /*1- Retrieve the department ID, department name, location ID, and city for each de
5  from the HR schema.
6  Hint: use natural join*/
7  select * from oehr_departments;
8  SELECT department_id, department_name,
9  location_id, city
10 FROM oehr_departments
11 NATURAL JOIN oehr_locations;
12 SELECT department_id, department_name,
13 oehr_locations.location_id, city

```

Results Explain Describe Saved SQL History

Owner	Name	Description
-------	------	-------------

Language: SQL Rows: 10 Clear Command Find Tables

SQL Editor

```

13 oehr_locations.location_id, city
14 FROM oehr_departments,oehr_locations
15 where oehr_locations.location_id=oehr_departments.location_id;
16 SELECT department_id, department_name,
17 oehr_locations.location_id, city
18 FROM oehr_departments
19 inner join oehr_locations on oehr_locations.location_id=oehr_departments.location_id;
20 /*2- Retrieve the ID, full name , salary , department ID, department Name, location ID,
21 and street address for all employee with a salary more than $10000.*
22 Hint: use inner join*/
23 select employee_id, first_NAME ||' ' ||LAST_NAME as full_name, salary , e.department_id,
24 d.department_name, d.Location_id, l.STREET_ADDRESS
25 from oehr_employees e, oehr_departments d, oehr_locations l

```

Results Explain Describe Saved SQL History

Enter SQL statement or PL/SQL command and click Run to see the results.

APEX

App Builder

SQL Workshop

Team Development

Gallery

Search

SQL Commands

Language

SQL

Rows

10

Clear Command

Find Tables

↶

↷

🔍

🔗

A::

```

25 from oehr_employees e, oehr_departments d, oehr_locations l
26 where e.salary>10000
27 and (e.department_id=d.department_id)
28 and (d.Location_id=l.Location_id)
29 select employee_id, first_NAME ||' ' ||LAST_NAME as full_name, salary , e.department_id,
30 d.department_name, d.Location_id, l.STREET_ADDRESS
31 from oehr_employees e inner join oehr_departments d on e.department_id=d.department_id
32 inner join oehr_locations l on d.Location_id=l.Location_id and e.salary>10000
33 /*3- Retrieve the last name of the employee and the last name of his/her manager.
34 Sort the result according to the manager last name.*/
35 SELECT worker.last_name emp, manager.last_name mgr
36 FROM oehr_employees worker JOIN oehr_employees manager

```

Results

Explain

Describe

Saved SQL

History

Enter SQL statement or PL/SQL command and click Run to see the results.

APEX

App Builder

SQL Workshop

Team Development

Gallery

Search

SQL Commands

Language

SQL

Rows

10

Clear Command

Find Tables

↶

↷

🔍

🔗

A::

```

36 from oehr_employees worker JOIN oehr_employees manager
37 ON (worker.manager_id = manager.employee_id)
38 ORDER BY mgr;
39 /*4- Retrieve the employee's ID, Full name, salary, job title, manager ID and manger full name
40 for all employees
41 who work for a finance manager.*/
42 Select e.employee_id, e.first_name ||' ' ||e.last_name as full_name, e.salary , j.job_title,
43 e.manager_id, m.employee_id, m.first_name ||' ' ||m.last_name as manager_name
44 from oehr_employees e, oehr_employees m, oehr_jobs j
45 where e.manager_id = m.employee_id
46 AND (e.job_id=j.job_id )
47 AND m.job_id in (select job_id from oehr_jobs where job_title='Finance Manager');
48 select EMPLOYEE_ID,first_NAME ||' ' ||LAST_NAME as full_name,salary ,

```

Results

Explain

Describe

Saved SQL

History

↑ SQL Commands

Language SQL ? Rows 10 ? Clear Command Find Tables

↶ ↷ 🔍 ↗ A::

```
48 select EMPLOYEE_ID,first_name || ' ' ||last_name as full_name,salary ,
49 e.department_id,d.department_name,d.location_id,l.STREET_ADDRESS
50 from employees e ,departments d,locations l
51 where
52 (e.department_id=d.department_id) and
53 (d.location_id=l.location_id) and
54 d.department_name='Accounting' and e.salary>10000
55 /*5- Retrieve all the information in department's ID, department's name and the Full name
56 of the employess if he/she existed in the department */
57 -- could be right join too
58 select oehr_departments.department_id, department_name,first_name || ' ' ||last_name as
59 full_name
60 from oehr_departments left join oehr_employees
```

Results Explain Describe Saved SQL History

Enter SQL statement or PL/SQL command and click Run to see the results.

APEX App Builder SQL Workshop Team Development Gallery

↑ SQL Commands

Language SQL ? Rows 10 ? Clear Command Find Tables

↶ ↷ 🔍 ↗ A::

```
56 of the employess if he/she existed in the department */
57 -- could be right join too
58 select oehr_departments.department_id, department_name,first_name || ' ' ||last_name as
59 full_name
60 from oehr_departments left join oehr_employees
61 on oehr_departments.department_id=oehr_employees.department_id
62 /*6- Retrieve all the information from departments and locations tables*/
63 select d.department_id, department_name, d.location_id, STREET_ADDRESS
64 from oehr_locations l full outer join oehr_departments d on d.location_id=l.location_id;
```

Results Explain Describe Saved SQL History

LAB 7:

APEX

App Builder

SQL Workshop

Team Development

Gallery

↑ SQL Commands

Language SQL Rows 10 Clear Command Find Tables

↶ ↷ 🔍 ↵ A::

1 ----- Lap 7 -----

2 ----- ABDULLAH KALID ALHARBI-----

3 ----- 4201666 -----

4 1--

5 Create table hremployee as (select * from oehr_employees);

6 Create table hrdepartment as select * from oehr_departments;

7 2--

8 INSERT INTO hremployee

9 VALUES (1001 ,

10 ' Den', 'Raphealy ,'

11 ' DRAPHEAL', '515.127.4561 ,'

12 TO_DATE('FEB 3, 1999', 'MON DD, YYYY') ,

13 ' SA_REP' 11000 0.2 100 60)

Results Explain Describe Saved SQL History

APEX

App Builder

SQL Workshop

Team Development

Gallery

↑ SQL Commands

Language SQL Rows 10 Clear Command Find Tables

↶ ↷ 🔍 ↵ A::

13 SA_REP , 11000, 0.2, 100, 60);

14 3--

15 select * from hremployee where employee_id=1001 ;

16 4--

17 INSERT INTO hrdepartment

18 VALUES (280,'Technology And Equipment',1001,1200) ;

19 INSERT INTO hrdepartment

20 VALUES (290,'Production',1001,1200) ;

21 5--

22 update hremployee


23 set DEPARTMENT_ID= 80

24 where DEPARTMENT_ID=60 ;

25 6--





Results Explain Describe Saved SQL History

Enter SQL statement or PL/SQL command and click Run to see the results.

 **APEX** App Builder **SQL Workshop** Team Development Gallery

SQL Commands


Language: SQL Rows: 10 Clear Command Find Tables

    A:

```
25 6--
26 select * from hrmemployee where employee_id = 113 ;
27 select * from hrmemployee where employee_id = 205 ;
28 UPDATE hrmemployee
29 SET (job_id,salary) = (SELECT job_id,salary
30 FROM hrmemployee
31 WHERE employee_id = 205 )
32 WHERE employee_id = 113 ;
33 7--
34 Delete from hrdepartment
35 where department_name='Finance'
36 8--
37 DELETE FROM hrmemployee
```





Results Explain Describe Saved SQL History

Enter SQL statement or PL/SQL command and click Run to see the results.

 **APEX** App Builder **SQL Workshop** Team Development Gallery

SQL Commands

Language: SQL Rows: 10 Clear Command Find Tables

    A:

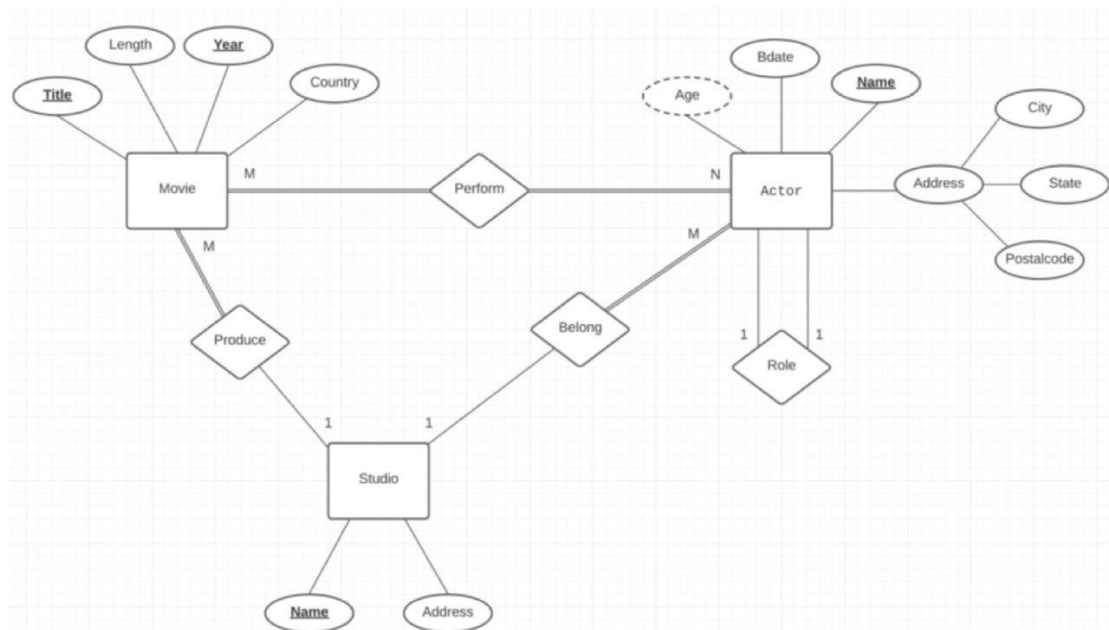
```
37 DELETE FROM hrmemployee
38 WHERE department_id IN
39 ( SELECT department_id
40 FROM hrdepartment
41 WHERE department_name
42 LIKE '%Public ;)%'
43 9--
44 CREATE VIEW KING_View (Eno, FIRSTNAME, LASTNAME, EMAIL, PHONE, JOBID,Dno,Dname) AS
45 SELECT
46 EMPLOYEE_ID,FIRST_NAME, LAST_NAME, EMAIL, PHONE_NUMBER, JOB_ID, oehr_departments.DEPAR
47 TMENT_ID, department_name FROM oehr_employees, oehr_departments
48 WHERE oehr_employees.department_id=oehr_departments.department_id and
49 oehr_employees.manager_id = 100
```

Results Explain Describe Saved SQL History

Enter SQL statement or PL/SQL command and click Run to see the results.

```
Language SQL ? Rows 10 ? Clear Command Find Tables
SELECT
EMPLOYEE_ID,FIRST_NAME,LAST_NAME,EMAIL,PHONE_NUMBER,JOB_ID,oehr_departments.DEPAR
TMENT_ID,department_name FROM oehr_employees, oehr_departments
WHERE oehr_employees.department_id=oehr_departments.department_id and
oehr_employees.manager_id = 100
select * from King_view
10--Drop the created view
drop view KING_View;
```

LAB 8:



LAB 9:

