

ASSIGNMENT 5

1. Create and insert data in – “emp” and “dept”(Check HR schema, table names may be different.)

Ans 1)

SQL Worksheet

Clear Find Actions Save Run

```
1 create table emp as select * from hr.employees;
2 insert into emp
3 values (99, 'Shagil', 'Islam', 'shagilislam@gmail.com', 7003787434, '4-NOV-22', 'IT_PROG', 25000, .1, 100, 90);
4
5 create table dept as select * from hr.departments;
6 insert into dept
7 values(5, 'Shagil Dept', 77, 300);
8
9
10 select * from emp
11 order by employee_id;
12 select * from dept
13 order by department_id;
```

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
99	Shagil	Islam	shagilislam@gmail.com	7003787434	04-NOV-22	IT_PROG	25000	.1	100	90
100	Steven	King	SKING	515.123.4567	17-JUN-03	AD_PRES	24000	-	-	90
101	Neena	Kochhar	NKOCHHAR	515.123.4568	21-SEP-05	AD_VP	17000	-	100	90
102	Lex	De Haan	LDEHAAN	515.123.4569	13-JAN-01	AD_VP	17000	-	100	90
103	Alexander	Hunold	AHUNOLD	590.423.4567	03-JAN-06	IT_PROG	9000	-	102	60
104	Bruce	Ernst	BERNST	590.423.4568	21-MAY-07	IT_PROG	6000	-	103	60
105	David	Austin	DAUSTIN	590.423.4569	25-JUN-05	IT_PROG	4800	-	103	60

SQL Worksheet

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5 create table dept as select * from hr.departments;
6 insert into dept
7 values(5, 'Shagil Dept', 77, 300);
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10 select * from emp
11 order by employee_id;
12 select * from dept
13 order by department_id;
```

DEPARTMENT_ID	DEPARTMENT_NAME	MANAGER_ID	LOCATION_ID
5	Shagil Dept	77	300
10	Administration	200	1700
20	Marketing	201	1800
30	Purchasing	114	1700
40	Human Resources	203	2400
50	Shipping	121	1500
60	IT	103	1400

2. Display name of employees , department name and job name for each

Employee

Ans 2)

SQL Worksheet Clear Find Actions Save Run

```

1 select emp.first_name||' '||emp.last_name as name, dept.department_name, emp.job_id from
2 emp left join dept on emp.department_id = dept.department_id;

```

NAME	DEPARTMENT_NAME	JOB_ID
Jennifer Whalen	Administration	AD_ASST
Michael Hartstein	Marketing	MK_MAN
Pat Fay	Marketing	MK_REP
Den Raphaely	Purchasing	PU_MAN
Alexander Khoo	Purchasing	PU_CLERK
Shelli Baida	Purchasing	PU_CLERK
Sigal Tobias	Purchasing	PU_CLERK
Guy Himuro	Purchasing	PU_CLERK
Karen Colmenares	Purchasing	PU_CLERK
Susan Mavris	Human Resources	HR_REP

3. Display the number of employees in each department in the order of their count of employees.(Note – display the department with highest number of employees, followed by next highest, so on)

Ans 3)

SQL Worksheet Clear Find Actions Save Run

```

1 select dept.department_name, count(emp.employee_id) as no_of_employees
2 from emp, dept
3 where emp.department_id = dept.department_id
4 group by dept.department_name
5 order by count(emp.employee_id) desc;

```

DEPARTMENT_NAME	NO_OF_EMPLOYEES
Shipping	45
Sales	34
Purchasing	6
Finance	6
IT	5
Executive	4
Accounting	2
Marketing	2
Administration	1
Public Relations	1

4. Display the department name along with no of employees and average salary of that department

Ans 4)

SQL Worksheet

Clear

Find

Actions

Save

Run

```

1 select dept.department_name, count(emp.employee_id) as no_of_employees, avg(emp.salary) as avg_salary
2 from emp, dept
3 where emp.department_id = dept.department_id
4 group by dept.department_name;

```

DEPARTMENT_NAME	NO_OF_EMPLOYEES	AVG_SALARY
Sales	34	8955.882352941176470588235294117647058824
Marketing	2	9500
Purchasing	6	4150
Administration	1	4400
Executive	4	20750
IT	5	5760
Finance	6	8601.3333333333333333333333333333333333
Shipping	45	3475.5555555555555555555555555555555556
Public Relations	1	10000
Human Resources	1	6500

5. For each department, find out no. of jobs the employees are assigned to.

Ans 5)

SQL Worksheet

Clear

Find

Actions

Save

Run

```

1 select dept.department_name, count(emp.job_id) as no_of_jobs|
2 from emp, dept
3 where emp.department_id = dept.department_id
4 group by dept.department_name;

```

DEPARTMENT_NAME	NO_OF_JOBS
Sales	34
Marketing	2
Purchasing	6
Administration	1
Executive	4
IT	5
Finance	6
Shipping	45
Public Relations	1
Human Resources	1

6. Find the maximum salary in each department, but only for those departments which have more than one employee?(Display in order of department id)

Ans 6)

SQL Worksheet Clear Find Actions Save Run

```

1 select dept.department_name, max(emp.salary) as max_salary
2 from emp, dept
3 where emp.department_id = dept.department_id
4 group by dept.department_name;

```

DEPARTMENT_NAME	MAX_SALARY
Sales	14000
Marketing	13000
Purchasing	11000
Administration	4400
Executive	25000
IT	9000
Finance	12008
Shipping	8200
Public Relations	10000
Human Resources	6500

7. Group by the employees based on the first character of employee first name. Display the results in alphabetic order (descending) of first character.

Ans 7)

SQL Worksheet Clear Find Actions Save Run

```

1 select first_name||' '||last_name as name
2 from emp
3 order by first_name desc;

```

NAME
Winston Taylor
William Gietz
William Smith
Vance Jones
Valli Pataballa
Trenna Rajs
Timothy Gates
Tayler Fox
TJ Olson
Susan Mavris

8. Display department id wise count of employees

Ans 8)

```

1 select dept.department_id, count(emp.employee_id) as no_of_employees
2 from emp, dept
3 where emp.department_id = dept.department_id
4 group by dept.department_id;

```

DEPARTMENT_ID	NO_OF_EMPLOYEES
50	45
40	1
110	2
90	4
30	6
70	1
10	1
20	2
60	5
100	6

9.

-who are 'CLERK'

-Apart from the above condition, make sure - only those departments are selected, which has more than 3 'CLERK' in it

Ans 9)

```

1 select dept.department_id, count(emp.employee_id) as no_of_employees
2 from emp, dept
3 where emp.department_id = dept.department_id
4 and emp.employee_id in
5 (select employee_id from hr.employees
6 where job_id = 'PU_CLERK' or job_id = 'ST_CLERK')
7 group by dept.department_id;

```

DEPARTMENT_ID	NO_OF_EMPLOYEES
50	20
30	5

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2 rows selected.

10. Display the list of employees and their supervisor from "emp" table.(check the pre-existing table name for employees)

Ans 10)

SQL Worksheet

Clear Find Actions Save Run

```

1 select first_name, last_name, manager_id from hr.employees
2 where manager_id is not null;

```

FIRST_NAME	LAST_NAME	MANAGER_ID
Ellen	Abel	149
Sundar	Ande	147
Mozhe	Atkinson	121
David	Austin	103
Hermann	Baer	101
Shelli	Baida	114
Amit	Banda	147
Elizabeth	Bates	148
Sarah	Bell	123
David	Bernstein	145

11. Write query to find out any departments that are present in department table but does not have employees.

Ans 11)

SQL Worksheet

Clear Find Actions Save Run

```

1 select * from (select dept.department_name, count(emp.employee_id) as no_of_employees
2 from emp, dept
3 where emp.department_id = dept.department_id
4 group by dept.department_name)
5 where no_of_employees = 0;

```

no data found