

### Lab - 3

#### SQL query based on Group by clause

1. Display job ID of jobs that were done by more than 3 employees for more than 100 days

QUERY

```
SELECT job_id AS job, COUNT(employee_id) AS  
employee_count  
FROM employees  
GROUP BY job_id  
HAVING COUNT(job_id) > 3;
```

OUTPUT

JOB	EMPLOYEE_COUNT
FI_ACCOUNT	5
IT_PROG	5
PU_CLERK	5
SA_MAN	5
SA_REP	30
SH_CLERK	20
ST_CLERK	20
ST_MAN	5

2. Display departments in which more than five employees have commission percentage.

QUERY

```
SELECT department_id  
FROM employees  
WHERE commission_pct IS NOT NULL  
GROUP BY department_id  
HAVING COUNT(employee_id) > 5;
```

OUTPUT

DEPARTMENT_ID
80

3. Display job ID, number of employees, sum of salary, and difference between highest salary and lowest salary of the employees of the job.

QUERY

```
SELECT job_id, COUNT(employee_id) AS no_of_employees,  
SUM(salary) AS total_salary,  
MAX(salary) - MIN(salary) AS salary_difference  
FROM employees  
GROUP BY job_id;
```

OUTPUT

JOB_ID	NO_OF_EMPLOYEES	TOTAL_SALARY	SALARY_DIFFERENCE
IT_PROG	5	28800	4800
AC_MGR	1	12000	0
AC_ACCOUNT	1	8300	0
ST_MAN	5	36400	2400
PU_MAN	1	11000	0
AD_ASST	1	4400	0
AD_VP	2	34000	0

4. Display the details of departments in which the max salary is greater than 10000 for employees who did a job in the past.

QUERY

```
SELECT department_id
FROM employees
GROUP BY department_id
HAVING MAX(salary) > 10000
```

OUTPUT

DEPARTMENT_ID
100
30
90
20
110
80

5. Display details of manager who manages more than 5 employees.

QUERY

```
SELECT manager_id, COUNT(employee_id) AS employee_count
FROM employees
GROUP BY manager_id
HAVING COUNT(employee_id) > 5;
```

OUTPUT

MANAGER_ID	EMPLOYEE_COUNT
100	14
123	8
120	8
121	8
147	6
148	6
149	6