SQL TASK

```
create database task;
use task;
create table departments(
dept_id int primary key,
dept_name varchar(100)
);
insert into departments values
(1, 'human resource'),
(2, 'engineering'),
(3, 'marketing');

create table employees(
emp_id int primary key,
emp_name varchar(100),
dept_id int,
salary int
);
insert into employees values
(101, 'amit sharma', 1, 30000),
(102, 'neha reddy', 2, 40000),
(103, 'faizan ali', 2, 48000),
(104, 'divya mehta', 3, 35000),
(105, 'ravi verma', NULL, 28000);
```

1. Show all employees with their department names.

```
select e.emp_name, d.dept_name
from employees e
```

```
join departments d
on e.dept_id=d.dept_id;
```

2. List employees who do not belong to any department.

```
select e.emp_name
from employees e
left join departments d
on e.dept_id=d.dept_id
where e.dept_id is null;
```

3. Display the total number of employees in each department.

```
select d.dept_name, count(e.dept_id) as emp_count
from departments d
join employees e on d.dept_id=e.dept_id
group by d.dept_name;
```

4. Show departments with no employees.

```
select d.dept_name
from employees e
left join departments d
on e.dept_id =d.dept_id
where e.dept_id is null;
```

5. List employee names and department names for those who earn more than 40,000.

```
select e.emp_name, d.dept_name, e.salary
from employees e
join departments d
on e.dept_id=d.dept_id
where salary>40000;
```