**SQL ASSIGNMENT (17.07.2025)**

**-- task 1**

create table products(

product\_id int primary key,

product\_name varchar(100),

category varchar(100),

price decimal(10,2),

stock\_quantity int,

added\_date date);

**-- task 2**

insert into products values (1, 'Smartphone', 'Electronics', 15000.00, 20, '2023-02-15'),

(2, 'Sofa', 'Furniture', 12000.00, 5, '2023-03-10'),

(3, 'Shoes', 'Fashion', 2500.00, 15, '2023-05-20'),

(4, 'Study Table', 'Furniture', 4500.00, 8, '2023-07-01'),

(5, 'Smartwatch', 'Electronics', 3500.00, 12, '2023-08-18');

**-- task 3**

SELECT \* FROM products;

select product\_name, price from products;

select \* from products where stock\_quantity<10;

select \* from products where price between 500 and 2000;

select \* from products where added\_date > '2023-01-01';

select \* from products where product\_name like 'S%';

select \* from products where category in ('Electronics', 'Furniture');

**-- task 4**

update products set price = 16000.00 where product\_id = 1;

update products set stock\_quantity = stock\_quantity + 5 WHERE category = 'Furniture';

delete from products where product\_id = 5;

delete from products where stock\_quantity = 0;

**USING JOINS**

create database dept;

use dept;

create table departments(

dept\_id int primary key,

dept\_name varchar(100));

insert into departments values(1,'HR'),(2,'Engineering'),(3,'Marketing');

select \* from departments;

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',2,45000),

(103,'Faizan ali',3,48000),

(104,'Divya Mehta',4,35000),

(105,'Ravi varma',5,20000);

select \* from employees;

**-- 1. Show all employees with their department names**

select e.emp\_name,d.dept\_name from employees e

left join departments d

on d.dept\_id = e.dept\_id;

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

select e.emp\_name from employees e

left join departments d

on d.dept\_id = e.dept\_id

where d.dept\_id is null;

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

select count(e.emp\_id) as total\_employees, d.dept\_name from employees e

left join departments d

on d.dept\_id = e.dept\_id

group by d.dept\_name;

**-- 4. Show departments with no employees**

select d.dept\_name from departments d

left join employees e

on d.dept\_id = e.dept\_id

where e.emp\_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 from employees e

join departments d

on d.dept\_id = e.dept\_id

where e.salary>40000;