**Assignment 2 – Solution**

**Q1. Select specific columns: employee name and salary**

SELECT emp\_name, salary FROM employees;

**Q2. Select rows where salary is greater than 55000**

SELECT \* FROM employees

WHERE salary > 55000;

**Q3. Select employees in department 3 (IT)**

SELECT \* FROM employees

WHERE dept\_id = 3;

**Q4. Select employees ordered by salary (highest first)**

SELECT \* FROM employees

ORDER BY salary DESC;

**Q5. Select top 2 employees with lowest salary**

SELECT \* FROM employees

ORDER BY salary ASC

LIMIT 2;

**Q6. INNER JOIN: List employee names with their department names**

SELECT e.emp\_name, d.dept\_name

FROM employees e

INNER JOIN departments d ON e.dept\_id = d.dept\_id;

**Q7. LEFT JOIN: List all employees with their department (if any)**

SELECT e.emp\_name, d.dept\_name

FROM employees e

LEFT JOIN departments d ON e.dept\_id = d.dept\_id;

**Q8. RIGHT JOIN: List all departments with employees (if any)**

SELECT e.emp\_name, d.dept\_name

FROM employees e

RIGHT JOIN departments d ON e.dept\_id = d.dept\_id;

**Q9. FULL OUTER JOIN simulation using UNION**

Note: MySQL does **not support FULL OUTER JOIN** directly.

SELECT e.emp\_name, d.dept\_name

FROM employees e

LEFT JOIN departments d ON e.dept\_id = d.dept\_id

UNION

SELECT e.emp\_name, d.dept\_name

FROM employees e

RIGHT JOIN departments d ON e.dept\_id = d.dept\_id;

**Q10. CROSS JOIN: List all combinations of employees and departments**

SELECT e.emp\_name, d.dept\_name

FROM employees e

CROSS JOIN departments d;