SQL (Structured Query Language) Assignment Solutions

1. Creating a table to store employee details

```
CREATE TABLE employees (
emp\_id INT PRIMARY KEY,
name VARCHAR(100) NOT NULL,
department VARCHAR(50),
salary DOUBLE,
join\_date DATE
);
```

2. Insert records into the employees table

```
INSERT INTO employees (emp\_id, name, department, salary, join\_date) VALUES
(101, 'John Doe', 'HR', 45000, '2021-06-15'),
(102, 'Jane Smith', 'IT', 75000, '2020-01-10'),
(103, 'Alice Johnson', 'Finance', 60000, '2019-08-23'),
(104, 'Bob Brown', 'IT', 80000, '2022-03-01'),
(105, 'Eve Davis', 'Marketing', 55000, '2021-11-05');
```

3. Select all data from the employees table

SELECT * FROM employees;

4. Select specific columns (name and department)

SELECT name, department FROM employees;

5. Select employees from the IT department

SELECT * FROM employees
WHERE department = 'IT';

6. Select IT employees with salary greater than 75000

SELECT * FROM employees
WHERE department = 'IT' AND salary > 75000;

7. Select employees from IT or Finance department

SELECT * FROM employees
WHERE department IN ('IT', 'Finance');

8. Select employees with salary between 50000 and 70000

```
SELECT \* FROM employees
WHERE salary BETWEEN 50000 AND 70000;
```

9. Select employees whose names start with J

```
SELECT \* FROM employees
WHERE name LIKE 'J%';
```

10. Display all employees ordered by salary descending

```
SELECT \* FROM employees
ORDER BY salary DESC;
```

11. Update salary of employee with emp_id 104

```
UPDATE employees
SET salary = 82000
WHERE emp\_id = 104;
```

12. Delete employee with emp_id 105

```
DELETE FROM employees
WHERE emp\_id = 105;
```

13. Calculate average salary of employees grouped by department

```
SELECT department, AVG(salary) AS avg\_salary
FROM employees
GROUP BY department;
```

14. Count number of employees in each department where count is greater than 1

```
SELECT department, COUNT(*) AS emp\_count
FROM employees
GROUP BY department
HAVING COUNT(*) > 1;
```