

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**Lab Report**

**Course Title: Advance Database management System Lab**

**Course Code: CSE – 436**

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| **Submitted By** | **Submitted To** |
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**Submission date: 18.08.2025**

* **Experiment No:- 02**
* **Experiment Name: Implementing Basic SELECT Queries in SQL.**
* **Create table**
* **Code:**

CREATE TABLE Employee (

EmployeeID INT PRIMARY KEY,

Name VARCHAR(50),

Department VARCHAR(30),

Position VARCHAR(30),

Salary DECIMAL(10, 2),

HireDate DATE);

* **Insert the following record into the Student table**

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| * **Code:**   INSERT INTO Employee  VALUES (101, 'Alice Roy', 'HR', 'Manager', 65000, '2018-06-01'),  (102, 'Babu Khan', 'IT', 'Developer',50000, '2019-03-15'),  (103,'Chadni Akter ','Finance','Analyst',47000, '2020-01-10'),  (104,'Dipon Das ', 'IT', 'Developer',52000, '2021-11-12 '),  (105,'Esha Rani ', 'HR', 'Executive', 40000, '2022-08-30'), (106,'Farid Ahmed', 'Finance', 'Manager',68000, '2017-02-01'),  (107, 'Gulshan Ara', 'IT', 'Manager', 70000, '2016-12-20'); | * **Output:** |

* **Question-1:**

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| * **Code:**   --Show employees whose names start with 'A'.  SELECT \* FROM Employee WHERE Name LIKE 'A%';  --Display the employee name and department where position ends with 'er'.  SELECT Name, Department FROM Employee WHERE Position LIKE '%er';  --Show the first three characters of each employee's name.  SELECT SUBSTRING(name, 1,3) As first\_three\_char FROM Employee; | * **Output:** |

* **Question-2:**

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| * **Code:**   --List all employees ordered by salary in descending order..  SELECT \* FROM Employee ORDER BY Salary DESC; | * **Output:** |

* **Question-3:**

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| * **Code:**   --Write a query to list the names of employees from HR and Finance.  SELECT Name FROM Employee WHERE Department ='Hr' UNION SELECT Name FROM Employee WHERE Department ='Finance';  --Write a query to find names common to both IT and Finance departments using  SELECT Name FROM Employee WHERE Department = 'IT' INTERSECT SELECT Name FROM Employee WHERE Department = 'Finance';  --Write a query to find names of employees in IT but not in HR using.  SELECT Name FROM Employee WHERE Department = 'IT' EXCEPT SELECT Name FROM Employee WHERE Department = 'HR'; | * **Output:** |

* **Question-4:**

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| * **Code:**   --Find the total salary of all employees.  SELECT SUM(Salary) AS TotalSalary FROM Employee;  --Find the average salary in the IT department.  SELECT AVG(Salary) AS AvgITSalary FROM Employee WHERE Department = 'IT';  --Find the highest salary among employees.  SELECT MAX(Salary) AS MaxSalary FROM Employee;  --Count the number of employees in the Finance department.  SELECT COUNT(\*) AS FinanceCount FROM Employee WHERE Department = 'Finance'; | * **Output:** |

* **Question-5:**

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| * **Code:**   --Display each department along with the average salary of its employees.  SELECT Department, AVG(Salary) AS AvgSalary FROM Employee GROUP BY Department;  --Show departments where the average salary is greater than 50,000.  SELECT Department, AVG(Salary) AS AvgSalary FROM Employee GROUP BY Department HAVING AVG(Salary) > 50000;  --Find how many employees are there in each position..  SELECT Position, COUNT(\*) AS EmployeeCount FROM Employee GROUP BY Position; | * **Output:** |

* **Question-6:**

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| * **Code:**   --Find employees who earn more than the average salary.  SELECT \* FROM Employee WHERE Salary > (SELECT AVG(Salary) FROM Employee);  -- Display the names of employees who joined earlier than all HR employees.  SELECT Name FROM Employee WHERE HireDate < (SELECT MIN(HireDate) FROM Employee WHERE Department = 'HR');  -- Show the names of employees who have the same salary as someone in the Finance department.  SELECT Name FROM Employee WHERE Salary IN (SELECT Salary FROM Employee WHERE Department = 'Finance');  -- Find the employee(s) who has the second highest salary..  SELECT \* FROM Employee WHERE Salary = (SELECT MAX(Salary) FROM Employee WHERE Salary < (SELECT MAX(Salary) FROM Employee)); | * **Output:** |