# **Assignment 2**

#### Q-1. Write an SQL query to print the first three characters of  FIRST\_NAME from Worker table.

**Answer:**

SELECT SUBSTR(FIRST\_NAME, 1, 3) AS FIRST\_THREE\_CHARACTERS

FROM Worker;

This query uses the SUBSTR() function, which takes the string column FIRST\_NAME and extracts the first three characters from it. The result of this query will be a table with a single column FIRST\_THREE\_CHARACTERS, which will contain the first three characters of the FIRST\_NAME column for each row in the Worker table.

#### Q-2. Write an SQL query to find the position of the alphabet (‘a’) in the first name column ‘Amitabh’ from Worker table.

**Answer:**

SELECT INSTR('Amitabh', 'a') AS POSITION\_OF\_A;

This query uses the INSTR() function, which returns the position of a substring in a string. In this case, the string is 'Amitabh' and the substring is 'a'. The result of this query will be a table with a single column POSITION\_OF\_A, which will contain the position of the first occurrence of 'a' in 'Amitabh', which is 2.

#### Q-3. Write an SQL query to print the name of employees having the highest salary in each department.

**Answer:**

SELECT Department, Name, Salary

FROM (SELECT Department, Name, Salary,

ROW\_NUMBER() OVER (PARTITION BY Department ORDER BY Salary DESC) AS Rank FROM Worker) AS T WHERE Rank = 1;

This query first creates a subquery that selects the Department, Name, and Salary columns from the Worker table and uses the ROW\_NUMBER() function to rank the employees within each department by their salary in descending order. The outer query then selects only the rows where the rank is 1, which correspond to the employees with the highest salary in each department. The result of this query will be a table with three columns: Department, Name, and Salary, where each row represents the employee with the highest salary in their department.