

Ex.No: 3	WRITING BASIC SQL SELECT STATEMENTS
Date: 2/8/24	

## OBJECTIVES

After the completion of this exercise, the students will be able to do the following:

- List the capabilities of SQL SELECT Statement
- Execute a basic SELECT statement

## Capabilities of SQL SELECT statement

A SELECT statement retrieves information from the database. Using a select statement, we can perform

- ✓ Projection: To choose the columns in a table
- ✓ Selection: To choose the rows in a table
- ✓ Joining: To bring together the data that is stored in different tables

## Basic SELECT Statement

### Syntax

```
SELECT *|DISTINCT Column_name| alias
FROM table_name;
```

### NOTE:

DISTINCT—Suppress the duplicates.

Alias—gives selected columns different headings.

### Example: 1

```
SELECT * FROM departments;
```

### Example: 2

```
SELECT location_id, department_id FROM departments;
```

## Writing SQL Statements

- SQL statements are not case sensitive
- SQL statements can be on one or more lines.

### Using Literal Character String

- A literal is a character, a number, or a date included in the SELECT list.
- Date and character literal values must be enclosed within single quotation marks.

### Example:

SELECT last\_name||'is a'||job\_id AS "EMPLOYEES JOB" FROM employees;

### Eliminating Duplicate Rows

- Using DISTINCT keyword.

### Example:

SELECT DISTINCT department\_id FROM employees;

### Displaying Table Structure

- Using DESC keyword.

### Syntax

DESC table\_name;

### Example:

DESC employees;

### Find the Solution for the following:

#### True OR False

1. The following statement executes successfully.

#### Identify the Errors

SELECT employee\_id, last\_name  
sal\*12 ANNUAL SALARY  
FROM employees;

*SELECT employee\_id, last\_name sal\*12 AS ANNUAL-SALARY FROM employees;*

#### Queries

2. Show the structure of departments the table. Select all the data from it.

*Desc Employees table;*

*Select \* from Employees-table;*

3. Create a query to display the last name, job code, hire date, and employee number for each employee, with employee number appearing first.

*Select Employee-id, last-name, job-id, hire-date  
from Employees-table;*

4. Provide an alias STARTDATE for the hire date.

*Select hire-date as start-date from employees-table,*

5. Create a query to display unique job codes from the employee table.

*Select distinct job-id from Employee-table;*

6. Display the last name concatenated with the job ID, separated by a comma and space, and name the column EMPLOYEE and TITLE.

*Select last-name || ', ' || job-id AS 'Employees-Title'  
from Employees-table;*

7. Create a query to display all the data from the employees table. Separate each column by a comma. Name the column THE\_OUTPUT.

*SELECT employee-id ' ', ' || last-name ' ', ' ||  
Salary AS THE-OUTPUT FROM Employees;*

Evaluation Procedure	Marks awarded
Query(5)	5
Execution (5)	5
Viva(5)	5
Total (15)	15
Faculty Signature	