Ex.No.: 3

Date: 02/08/2024

WRITING BASIC SQL SELECT STATEMENTS

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 deparment_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;

SELECT * from employees;

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;

4. Provide an alias STARTDATE for the hire date.

SELECT hire_date AS Startdate from employees;

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

SELECT DISTINCT job_id from employees;

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 title FROM employees;

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||','||first_name||','||last_name ||','|| email||','|| Phone_number||','||hire_date||','||job_id||','|| salary||','|| commission_Pct||','||manager_id||','||department_id AS the_output FROM employees

Evaluation Procedure	Marks awarded
Query(5)	5
Execution (5)	5
Viva(5)	4
Total (15)	14
Faculty Signature	