EXERCISE-4

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—Suppr
ess 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.
- Keywords cannot be abbreviated or split across lines
- Clauses are usually placed on separate lines
- Indents are sued to enhance readability

Using Arithmetic Expressions

Basic Arithmetic operators like *, /, +, -can be used

Example:1

```
        SELECT last_name, salary, salary+300 FROM employees;
```

Example:2

```
SELECT last_name, salary, 12*salary+100 FROM employees;
```

The statement is not same as

```
SELECT last_name, salary, 12*(salary+100) FROM employees;
```

FROM employees;

Queries

Select employee_id, lastname, salary *12 as
Annual Salary from employee

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

DESC department
Select * from dept

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 employee's

4. Provide an alias STARTDATE for the hire date.

Select employee_id, last_name, job_id, hire date
as ' Start Date ' 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 " Employee and TITLE"
from Employee

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||',' job_id||','
Salary as the_output from employees;

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