

Assignment 1: Practice with Single Table Queries

In this assignment, you'll have the opportunity to practice everything you've learned in this section. DO NOT SKIP THIS ASSIGNMENT!

Review the data in the suppliers table shown below and answer the questions that follow. There is no SQL provided to load this data into the database because we're simulating an examination scenario. You will not have access to a code editor during the exam, so you have to use images. Get practice with seeing images of data and trying to solve the puzzles.

SUPPLIER_ID	SUPPLIER_NAME	CITY	STATE	TOTAL_SPENT
100	Shop of Epiphany	Augusta	Georgia	220,500.00
200	Instant Assemblers	Valdez	Alaska	37,000.00
300	Time Manufacturers	Redwood City	California	90,500.00
400	Roundhouse Inc.	New York City	New York	78,150.00
500	Smiths & Berries	Portland	Oregon	114,600.00
600	Wesson LLC	Yuma	Alaska	32,000.00
700	ICF Foods	Orlando	California	78,700.00
800	Cheffmens Inc.	Toledo	Georgia	187,500.00
900	Samwoods Drinks	Portland	Georgia	17,800.00

Questions for this assignment

1. Write a query that retrieves suppliers that work in either Georgia or California.

```
SELECT *  
  
FROM SUPPLIERS  
  
WHERE STATE IN ('Georgia, 'California')
```

2. Write a query that retrieves suppliers with the characters "wo" and the character "l" or "i" in their name.

```
SELECT *  
  
FROM SUPPLIERS  
  
WHERE SUPPLIER_NAME LIKE '%wo'  
  
AND (SUPPLIER_NAME LIKE '%l%' OR SUPPLIER_NAME LIKE '%i')
```

3. Write a query that retrieves suppliers on which a minimum of 37,000 and a maximum of 80,000 was spent.

```
SELECT *  
  
FROM SUPPLIERS  
  
WHERE TOTAL_SPENT BETWEEN 37000 AND 80000
```

4. Write a query that returns the supplier names and the state in which they operate meeting the following conditions:

- belong in the state Georgia or Alaska
- the supplier id is 100 or greater than 600
- the amount spent is less than 100,000 or the amount spent is 220,000

```
SELECT SUPPLIER_NAME, STATE
```

```
FROM SUPPLIERS
```

```
WHERE STATE IN ('Georgia', 'Alaska')
```

```
AND (SUPPLIER_ID = 100 OR SUPPLIER_ID > 600)
```

```
AND (TOTAL_SPENT < 100000 OR TOTAL_SPENT = 220000)
```

5. *TRUE or FALSE Question:*

The keywords such as SELECT and WHERE must always be capital in the SQL Query.

Answer: FALSE

Keywords in SQL are not case sensitive.

6. *TRUE or FALSE Question:*

The database works on first processing the filtering conditions and then processes the FROM condition.

Answer: FALSE

The FROM condition is the first clause that is processed while SQL querying.

7. *TRUE or FALSE Question:*

Having just the filter condition shown below in a SQL query will return all the records from the table.

WHERE 1 = 1

Answer: **TRUE**

The filter condition $1=1$ always result in a TRUE condition.

This is like the case when there is no filter condition hence all records will be returned.

8. *TRUE or FALSE question:*

NULL cannot be compared using an equal sign.

Answer: **TRUE**

NULL has no value, and so cannot be compared using the scalar value operators. In other words, no value can ever be equal to (or not equal to) NULL because NULL has no value.

Hence, SQL has special IS NULL and IS NOT NULL predicates for dealing with NULL.

9. *TRUE or FALSE question:*

The ORDER BY clause is processed before the FROM clause in a SQL statement and it's used to sort the columns in an ascending or descending fashion.

Answer: **FALSE**

The ORDER BY clause is one of the last clauses that is processed while SQL querying.