

Started on Wednesday, March 22, 2023, 10:10 AM**State** Finished**Completed on** Wednesday, March 22, 2023, 10:30 AM**Time taken** 20 mins 32 secs**Grade** 90.0 out of 100.0**Question 1**

Correct

8.0 points out of 8.0

Please choose the best word(s) to fill in the blank and complete each statement.

If you want to filter the rows that are returned by a SELECT statement, you must include a/an _____ clause.

WHERE



To return all of the columns from the base table, you can code the _____ operator in the SELECT clause.

asterisk, *



Unless you assign a/an _____, the column name in the result set is the same as the column name in the base table.

alias, column alias



To concatenate character strings, you use the _____ function in a string expression.

CONCAT



To override the order of precedence in an arithmetic expression, you can use _____.

parentheses



To prevent duplicate rows from being returned by a SELECT statement, you can code the _____ keyword in the SELECT clause.

DISTINCT



To sort the rows that are retrieved by a SELECT statement in descending sequence by invoice_total, you code this ORDER BY clause:

ORDER BY invoice_total _____

DESC



To search for null values, use the _____ clause.

IS NULL



Question 2

Correct

8.0 points out of 8.0

Please choose the best word(s) to fill in the blank and complete each statement.

Code example:

SELECT vendor_name, invoice_date

FROM vendors v **JOIN** invoices i

ON v.vendor_id = i.vendor_id

In most cases, the join condition of an inner join compares the primary key of one table to the _____ key of another table.

foreign



In most cases, the join condition of an inner join uses the _____ operator to compare two keys.

equals (=)



A table _____ can be used when you want to assign a temporary name to a table.

alias



If you want to join all of the rows in the first table of a SELECT statement with just the matched rows in a second table, you use a/an _____ join.

LEFT OUTER



When you use the implicit syntax for coding joins, the join conditions are coded in the _____ clause.

WHERE



(Refer to code example) This type of join is called a/an _____ join.

INNER



(Refer to code example) The “v” in this example is known as a/an _____.

table alias



You can combine inner and outer joins within a single _____ statement.

SELECT



Question 3

Correct

8.0 points out of 8.0

Please choose the best word(s) to fill in the blank and complete each statement.

An aggregate expression to find the oldest date in the invoice_date column:

_____.

MIN(invoice_date)



An aggregate expression to find the vendor_name column that's last in alphabetical order:

_____.

MAX(vendor_name)



An aggregate expression for the number of entries in the vendor_name column:

_____.

COUNT(vendor_name)



When coding a query, you can add one or more summary rows to a result set that uses grouping and aggregates by coding the _____ operator.

WITH ROLLUP



An aggregate expression for the number of unique values in the vendor_id column:

_____.

COUNT(DISTINCT vendor_id)



A SELECT statement that includes aggregate functions is often called a/an _____ query.

summary



An aggregate expression to calculate the average value of the invoice_total column:

_____.

AVG(invoice_total)



All of the aggregate functions ignore null values, except for the _____ function.

COUNT(*)

**Question 4**

Correct

2.0 points out of 2.0

The ORDER BY clause of the SELECT statement specifies the table that contains the data.

Select one:

- ☐ a. True
- ☒ b. False ✓

Question 5

Correct

2.0 points out of 2.0

The syntax for CONCAT_WS requires you to list the strings you wish to concatenate, followed by the separator to use between each string.

Select one:

- ☐ a. True
- ☒ b. False ✓

Question 6

Correct

2.0 points out of 2.0

When you code a SELECT statement, you must code the four main clauses in the following order SELECT, FROM, WHERE, ORDER BY.

Select one:

- ☒ a. True ✓
- ☐ b. False

Question 7

Incorrect

0.0 points out of 2.0

When using an aggregate function to calculate the average value of the invoice_total column, the correct syntax would be AVG(invoiceTotal).

Select one:

- ☒ a. True ✗
- ☐ b. False

Question 8

Correct

2.0 points out of 2.0

A SELECT statement that includes aggregate functions is often called an Aggregate or Summary query.

Select one:

- ☒ a. True ✓
- ☐ b. False

Question 9

Correct

2.0 points out of 2.0

COUNT(DISTINCT vendor_id) is an aggregate expression for the number of unique not null values in the vendor_id column.

Select one:

- ☒ a. True ✓
- ☐ b. False

Question 10

Correct

4.0 points out of 4.0

Which of the following WHERE clauses will return vendor names from A to C?

Select one:

- ☐ a. WHERE vendor_name = D
- ☒ b. WHERE vendor_name < 'D' ✓
- ☐ c. WHERE vendor_name = 'D'
- ☐ d. WHERE vendor_name < 'C'

Question 11

Correct

4.0 points out of 4.0

When coded in a WHERE clause, which of the following would **NOT** return rows for vendors in the cities of San Diego and Santa Ana?

Select one:

- ☐ a. vendor_city RLIKE 'SAN'
- ☒ b. vendor_city RLIKE 'NA\$' ✓
- ☐ c. vendor_city RLIKE '^SA'

Question 12

Correct

4.0 points out of 4.0

Which of the following is **NOT** a valid column alias?

Select one:

- ☐ a. Total
- ☒ b. total sales ✓
- ☐ c. total_sales
- ☐ d. "Total Sales"

Question 13

Correct

4.0 points out of 4.0

When coded in a WHERE clause, which search condition will return invoices when payment_date isn't null and invoice_total is greater than or equal to \$500?

Select one:

- ☐ a. payment_date IS NULL AND invoice_total > 500
- ☐ b. payment_date IS NOT NULL OR invoice_total >= 500
- ☐ c. NOT (payment_date IS NULL AND invoice_total <= 500)
- ☒ d. payment_date IS NOT NULL AND invoice_total >= 500 ✓

Question 14

Correct

4.0 points out of 4.0

Which of the following expressions does **NOT** compute 10% of the balance due if balance due is the invoice total minus the credit total minus the payment total?

Select one:

- ☒ a. invoice_total – credit_total – payment_total / 10 ✓
- ☐ b. (invoice_total – payment_total – credit_total) / 10
- ☐ c. (invoice_total - (payment_total + credit_total)) * 0.10
- ☐ d. ((invoice_total – payment_total) – credit_total) / 10

Question 15

Correct

4.0 points out of 4.0

When you code an ORDER BY clause, you can specify a

Select one:

- ☐ a. column name or alias only
- ☐ b. column name or expression only
- ☐ c. column name, alias, or expression only
- ☒ d. column name, alias, expression, or column number ✓

Question 16

Incorrect

0.0 points out of 4.0

When coded in a WHERE clause, which of the following search conditions will **NOT** return a result set that includes all invoices with an invoice_total value of \$1000 or less?

Select one:

- ☐ a. invoice_total <= 1000
- ☒ b. NOT (invoice_total > 1000) ✗
- ☐ c. invoice_total IN (0,1000)
- ☐ d. invoice_total BETWEEN 0 AND 1000

Question 17

Correct

4.0 points out of 4.0

Like a join, a union combines data from two or more tables. But, instead of combining columns from base tables, a union

Select one:

- ☐ a. is coded in the ORDER BY clause
- ☐ b. by default, does not eliminate duplicate rows
- ☐ c. combines columns from the same table
- ☒ d. combines the result sets of two or more SELECT statements ✓

Question 18

Correct

4.0 points out of 4.0

When you use the USING keyword for a join,

Select one:

- ☐ a. the join can't be an outer join
- ☐ b. the join can't be done on more than one column
- ☒ c. the join must be based on a column or columns that have the same name in both tables ✓
- ☐ d. the join must be an inner join

Question 19

Correct

4.0 points out of 4.0

In a cross join, all of the rows in the first table are joined with all of the

Select one:

- ☐ a. distinct rows in the second table
- ☐ b. matched rows in the second table
- ☐ c. unmatched columns in the second table
- ☒ d. rows from the second table ✓

Question 20

Correct

4.0 points out of 4.0

You can simulate a full outer join by using

Select one:

- ☒ a. a union ✓
- ☐ b. the ON clause
- ☐ c. a left outer join
- ☐ d. a self join

Question 21

Correct

4.0 points out of 4.0

In a join, column names need to be qualified only

Select one:

- ☐ a. in inner joins
- ☐ b. in outer joins
- ☐ c. when the code is confusing
- ☒ d. when the same column names exist in both tables ✓

Question 22

Incorrect

0.0 points out of 4.0

```
SELECT vendor_name, invoice_number
FROM invoices LEFT JOIN vendors
ON invoices.vendor_id = vendors.vendor_id
```

The total number of rows returned by this query must equal

Select one:

- ☐ a. the number of rows in the Invoices table
- ☒ b. the number of rows in the Vendors table ✗
- ☐ c. the number of rows in the Invoices table plus the number of rows in the Vendors table
- ☐ d. none of the above

Question 23

Correct

4.0 points out of 4.0

The six clauses of the SELECT statement must be coded in the following order:

Select one:

- ☐ a. SELECT, FROM, GROUP BY, HAVING, WHERE, ORDER BY
- ☐ b. SELECT, FROM, WHERE, ORDER BY, GROUP BY, HAVING
- ☒ c. SELECT, FROM, WHERE, GROUP BY, HAVING, ORDER BY ✓
- ☐ d. SELECT, FROM, ORDER BY, WHERE, GROUP BY, HAVING

Question 24

Correct

4.0 points out of 4.0

Which of the statements below best describes the result set returned by this SELECT statement?

```
SELECT vendor_id,  
SUM(invoice_total - payment_total - credit_total) AS    column_2  
FROM invoices  
WHERE invoice_total - payment_total - credit_total > 0  
GROUP BY vendor_id
```

Select one:

- ☐ a. The unpaid balance for each invoice
- ☒ b. The total unpaid balance due for each vendor_id ✓
- ☐ c. The total amount invoiced by each vendor_id
- ☐ d. The total of paid invoices for each vendor_id

Question 25

Correct

4.0 points out of 4.0

Which of the statements below best describes the result set returned by this SELECT statement?

```
SELECT vendor_state, COUNT(*) AS column_2  
FROM vendors  
GROUP BY vendor_state  
HAVING COUNT(*) > 1;
```

Select one:

- ☐ a. The names of the vendors in each state
- ☐ b. The duplicate vendors from each state
- ☐ c. The number of vendors in each state
- ☒ d. The number of vendors in each state that has more than one vendor ✓