


Started on Monday, 30 September 2024, 8:33 PM**State** Finished**Completed on** Monday, 30 September 2024, 8:53 PM**Time taken** 19 mins 26 secs**Marks** 2.00/12.00**Grade** 16.67 out of 100.00 Correct Answer**Question****1**

Complete

Mark 0.00 out of 1.00

Which of the following legally fill in the blank so you can run the main() method from the command line? (Choose all that apply)

```
public static void main( )
```

Select one or more:

- ☒ a. String... \$n
- ☐ b. String[] 123
- ☐ c. None of the above
- ☒ d. String _Names[]
- ☒ e. String abc[]
- ☒ f. String[] _names
- ☐ g. String names

Question**2**

Complete

Mark 0.00 out of 1.00

Given the following method, which of the method calls return 2? (Choose all that apply)

```
public int howMany(boolean b, boolean... b2) {
```

```
    return b2.length;          Var args always have to be the 2nd argument, last argument  
}
```

Select one or more:

- ☐ a. howMany(true);
- ☐ b. howMany();
- ☒ c. howMany(true, {true, true});
- ☒ d. howMany(true, true, true);
- ☐ e. howMany(true, {true});
- ☐ f. howMany(true, true);
- ☒ g. howMany(true, new boolean[2]);

Question 3

Not answered

Marked out of 1.00

14, 12, 21, 59, 231, ... ?

What comes next in the series?

Select one or more:

☒ a. 1149

☐ b. 987

☐ c. 938

☐ d. 1185

Question 4

Complete

Mark 0.00 out of 1.00

Choose the correct statement about the following code:

1: public interface Herbivore {

2: int amount = 10;

3: public static void eatGrass(); You can't override, define static methods

4: public int chew() { They have to be default or static

5: return 13;

6: }

7: }

Select one or more:

☒ a. The code will not compile because of lines 3 and 4.

☐ b. The code will not compile because of lines 2 and 3.

☒ c. It compiles and runs without issue.

☐ d. The code will not compile because of line 4.

☐ e. The code will not compile because of line 3.

☐ f. The code will not compile because of line 2.

Question 5

Complete

Mark 1.00 out of 1.00

Which of the following types of views can be updated directly in SQL?

Select one or more:

☒ a. Simple Views based on a single table without aggregations or joins

☐ b. Views based on multiple tables with JOINS

☐ c. Complex Views using aggregate functions

☐ d. Materialized Views

Question 6

Not answered

Marked out of 1.00

Which of the following statements correctly creates a non-correlated subquery in MySQL?

Select one or more:

- ☒ a. **SELECT employee_id, name FROM employees WHERE salary > (SELECT AVG(salary) FROM employees);**
- ☐ b. **SELECT employee_id, name FROM employees e, departments d WHERE e.department_id = d.department_id AND e.salary > d.budget;**
- ☒ c. **SELECT e.employee_id, e.name FROM employees e WHERE e.salary > (SELECT AVG(s.salary) FROM employees s WHERE s.department_id = e.department_id);**
- ☐ d. **SELECT employee_id, name FROM employees WHERE EXISTS (SELECT * FROM departments WHERE employees.department_id = departments.department_id);**

also

Question 7

Complete

Mark 0.00 out of 1.00

Consider the query:

SELECT E.Name, D.DeptName FROM Employees E NATURAL JOIN Departments D;

What condition must hold true for the query to execute successfully?

Select one or more:

- ☒ a. **Both tables must have a common column with the same name and data type.**
- ☐ b. **The Employees and Departments tables must have the same number of rows.**
- ☒ c. **Both tables must be related by a foreign key.**
- ☒ d. **Both tables must have primary keys.**

Question 8

Not answered

Marked out of
1.00

What is the result of the following code?

2: String s1 = "java";

3: StringBuilder s2 = new StringBuilder("java");

4: if (s1 == s2) You can't compare a string with a stringBuilder

5: System.out.print("1");

6: if (s1.equals(s2))

7: System.out.print("2");

Select one or more:

- ☒ a. The code does not compile.
- ☐ b. 12
- ☐ c. No output is printed.
- ☐ d. 1
- ☐ e. An exception is thrown.
- ☐ f. 2

Question 9

Complete

Mark 0.00 out of
1.00

What is printed besides the stack trace caused by the NullPointerException from line 16?

```
1: public class DoSomething {  
2:     public void go() {  
3:         System.out.print("A");  
4:         try {  
5:             stop();  
6:         } catch (ArithmeticException e) {  
7:             System.out.print("B");  
8:         } finally {  
9:             System.out.print("C");  
10:        }  
11:        System.out.print("D");  
12:    }  
13:    public void stop() {  
14:        System.out.print("E");  
15:        Object x = null;  
16:        x.toString();  
17:        System.out.print("F");  
18:    }  
19:    public static void main(String[] args) {  
20:        new DoSomething().go();  
21:    }  
22: }
```

Select one or more:

- ☒ a. AEC
- ☐ b. AECD
- ☐ c. AEBCD
- ☒ d. AE
- ☐ e. No output appears other than the stack trace.

Question 10

Not answered

Marked out of 1.00

Given a table Orders with columns OrderID, CustomerID, and OrderDate, which query returns the earliest order date for each customer?

Select one or more:

- ☐ a. **SELECT CustomerID, MIN(OrderDate) FROM Orders ORDER BY CustomerID;**
- ☐ b. **SELECT CustomerID, OrderDate FROM Orders WHERE OrderDate = (SELECT MIN(OrderDate) FROM Orders);**
- ☒ c. **SELECT CustomerID, MIN(OrderDate) FROM Orders GROUP BY CustomerID;**
- ☐ d. **SELECT CustomerID, OrderDate FROM Orders WHERE OrderDate = (SELECT MIN(OrderDate) FROM Orders);**

Question 11

Not answered

Marked out of 1.00

Which query correctly implements a correlated subquery?

Select one or more:

- ☐ a. **SELECT Name FROM Employees WHERE Salary > (SELECT MAX(Salary) FROM Employees);**
- ☒ b. **SELECT E.Name FROM Employees E WHERE E.Salary > (SELECT AVG(Salary) FROM Employees WHERE E.DepartmentID = Employees.DepartmentID);**
- ☐ c. **SELECT E.Name FROM Employees E WHERE E.Salary > (SELECT AVG(Salary) FROM Employees);**
- ☐ d. **SELECT employee_id, name FROM employees e, departments d WHERE e.department_id = d.department_id AND e.salary > d.budget;**

Question 12

Complete

Mark 1.00 out of
1.00

What is the output of the following code snippet?

```
3: java.util.List<Integer> list = new java.util.ArrayList<Integer>();  
4: list.add(10);  
5: list.add(14);  
6: for(int x : list) {  
7: System.out.print(x + ", ");  
8: break;  
9: }
```

Select one or more:

- ☐ a. The code will not compile because of line 8.
- ☐ b. 10, 14,
- ☒ c. 10,
- ☐ d. The code contains an infinite loop and does not terminate.
- ☐ e. 10, 14
- ☐ f. The code will not compile because of line 7.