

Exercise 4

Complete the following questions.

1. What is the purpose of the else block in an if-else statement?
 - a. To contain the remainder of the code for a method.
 - b. To contain code that is executed when the expression in an if statement is false.
 - c. To test whether an expression is false.
 - d. It is compulsory to add the else block in an if-else statement.
2. Which of the following sentences is suitable for testing a value in a switch construct?
 - a. The switch construct tests whether values are greater than or less than a single value.
 - b. The switch construct tests against a single variable.
 - c. The switch construct tests the value of a float, double, or boolean data type.
 - d. The switch construct must have a default clause.
3. What relational operators and conditional operators are mentioned in the following paragraph?

If the time is 8:00 am, then it is time for work and time for coffee. If the time is greater than 12:00 pm, it is time for lunch or time for tea. If the time is 5:00 pm or later, it is time to go home.

- a. ==, >, ==>
 - b. ==, &&, <
 - c. ==, &&, >
 - d. ==, ||, >
4. Read the following code snippet and identify the correct options.

```
1 String clothing1;  
2 String clothing2;  
3 clothing1 = "socks";  
4 clothing2 = "pants";  
5 if (clothing1 == clothing2)
```

- a. Line 5 tests if the String literals pointed to by the clothing1 and clothing2 references are equal.
 - b. Line 5 tests the String objects' references in memory, not their contents.
 - c. By replacing Line 5 with the **if (clothing1.equals(clothing2))** statement, the String literals referenced by clothing1 and clothing2 are equal.
 - d. Line 5 always returns true.