1. Introduction to Java Results for Christine En-Tse Cheng

Submitted Dec 13 at 4:32p.m.

Unanswered

Question 1

0 / 1 pts

Java is considered what type of programming language? Choose the best answer.

- A markup language
- A compiled language
- → A hybrid language
- A scripting language
- An interpreted language

Unanswered

Question 2

0 / 1 pts

Select the correct order (from top to bottom) of the layered computer architecture described in the course notes. Choose the best answer.

- application, hardware, OS
- → Java program, JVM, OS, hardware
- Java program, OS, hardware
- OS, hardware, JVM, Java program

See the notes for the architectural diagram.

Unanswered

Question 3

0 / 1 pts

The following code fragment is executed and runs without error:

```
int i;
```

Which of the following choices do not result in an error if added directly below the above line and compiled?

- → i = 1;
- i = 1.1;
- i = "hello";

Unanswered

Question 4

0 / 1 pts

Which of the following choices are a correct way to construct a String in Java?

- → String str = "newString";
- → String str;
  str = "newString";
- String str = String("newString");
- None of the choices will construct a String.

str = "newString";

String str;
str = new String("newString");

String str = new String("newString");

Unanswered

Question 5

0 / 1 pts

Which of the following code snippets will print `false`?

String a = new String("abcd");
String b = new String("abcd");
System.out.print(a == b);

String a = "abcd";
String b = "abcd";
System.out.print(a == b);

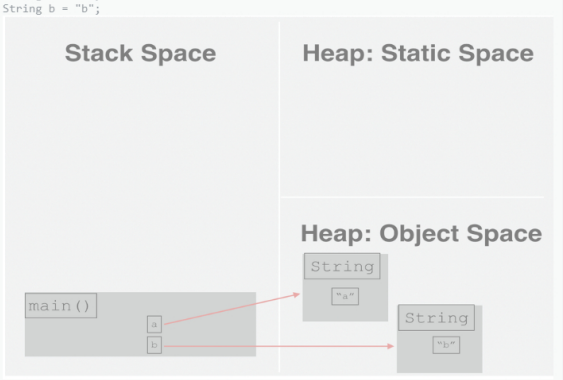
Unanswered

Question 6

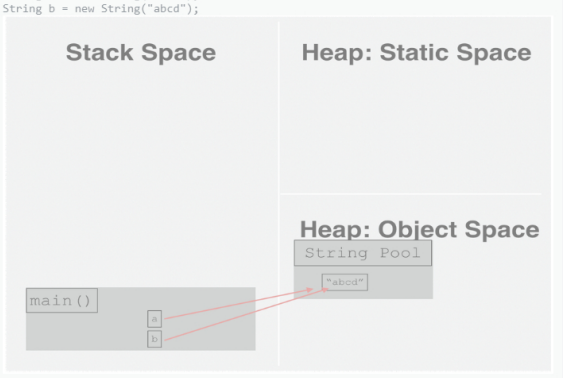
0 / 1 pts

Which of the following memory models match with the given code?

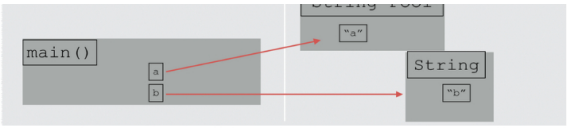
```
String a = "a";
String b = "b";
```




```
String a = new String("abcd");
String b = new String("abcd");
```




```
String a = "a";
String b = new String("b");
```



- [ ] None of the memory model diagrams provided match their code.

Unanswered

Question 7

0 / 1 pts

Which of the following statements is correct?

- [ ] All primitive types and class types are immutable.
- [ ] There are mutable primitive types and immutable primitive types.
  There are mutable class types and immutable class types.
- [ ] All primitive types are immutable.
  All class types are mutable.
- [ ] Every type in Java is mutable.
- [x] All primitive types are immutable.
  There are mutable class types and immutable class types.

Unanswered

Question 8

0 / 1 pts

Which of the following types are *reference* types? Check all that apply.

Hint: Look at the first letter of each type

- [ ] double
- [x] Integer
- [x] Object
- [x] Character
- [x] String
- [ ] int
- [ ] char
- [x] Double

Unanswered

Question 9

0 / 1 pts

Consider the following code. Which of the following will instantiate (create an instance of) class Moogah and print the value of its blurb variable?

```
public class Moogah {
  public String blurb;
  private int someNum;

  // constructor for Moogah
  Moogah(String blurb, int x) {
    this.blurb = blurb;
    someNum = x;
  }

  public String getBlurb() {
    return blurb;
  }
}
```

- [ ]
```
Moogah var1 = new Moogah();
System.out.println(var1.getBlurb());
```

- [x]
```
Moogah var1 = new Moogah("Hello", 2);
System.out.println(var1.getBlurb());
```

```
Moogah var1 = new Moogah();
System.out.println(var1.blurb);
```

Unanswered

Question 10

0 / 1 pts

Given the code below, match the expressions on the left to the what they evaluate to on the right.

```
int[] tweedle = new int[20];
int[][] dee = new int[5][10];
String[] dum = new String[22];

tweedle[1] = 1;
tweedle[2] = 100;
dum[0] = new String("Hi");

dee[0][0] = 0;
dee[0][1] = 1;
dee[0][2] = 2;
```

✗ **dee[0][1]** [ ]

1

✗ **dee[1][1]** [ ]

What is the default value for an int?

0

✗ **dum[tweedle[1]]** [ ]

null

✗ **dum[dee[0]]** [ ]

indexing requires an integer value; what is the type of dee[0]? Does this get determined at runtime or compile time?

Note: there was a typo in the question before — it should have read dum[dee[0]] rather than dum[dee[0][1]]. For dum[dee[0][1]] you would get null.

a compiler error occurs

✗ **dum[dee[0][1] - 1].charAt(1)** [ ]

'i'

Other Incorrect Match Options:

- a runtime error occurs
- 'H'
- 2
- 100
- "Hi"
- -1

Unanswered

Question 11

0 / 1 pts

If the following code is executed, what is printed?

```
public static void main(String[] args) {
  int testscore = 76;
  char grade;

  if (testscore >= 90) {
    grade = 'A';
  } else if (testscore >= 80) {
    grade = 'B';
  } else if (testscore >= 70) {
    grade = 'C';
  } else if (testscore >= 60) {
    grade = 'D';
```

```
  } else {
    grade = 'F';
  }
  System.out.println(grade);
}
```

- null
- B
- C
- A
- D
- F

Unanswered

Question 12

0 / 1 pts

What does the following code print when executed?

```
boolean a = true;
int i = 5;
int j = 10;
int k = 15;
boolean b = i < j && j < k;
System.out.println(!b || a);
```

- false
- true

Unanswered

Question 13

0 / 1 pts

Suppose we want to print numbers from 1 to 5 and from 5 to 1. Which of the following code fragments will achieve this and do not result in an error?

HINT: There are 5 correct choices in total

- [x]
```
for (int i = 1; i <= 5 ; i++) {
  System.out.println(i + ", " + (6-i));
}
```
- [ ]
```
int i;
for (; i <= 5 ; i++) {
  System.out.println(i + ", " + (6-i));
}
```
- [ ]
```
for (int i = 1, j = 5; i <= 5, true; i++, j--) {
  System.out.println(i + ", " + j);
}
```
- [x]
```
for (int i = 1, j = 5; i <= 5 && true; i++, j--) {
  System.out.println(i + ", " + j);
}
```
- [x]
```
int i;
for (i = 1; i <= 5 ;) {
  System.out.println(i + ", " + (6-i));
  i++;
}
```
- [x]
```
int i = 0;
for (++i; i <= 5 ; i++) {
  System.out.println(i + ", " + (6-i));
}
```
- [x]
```
int i = 1;
for (; i <= 5 ; i++) {
  System.out.println(i + ", " + (6-i));
}
```

Don't forget that you can try these out in IntelliJ to double check your understanding of the syntax. Stepping through with the debugger may also help.