

Week 5 pre-reading quiz

Test your knowledge for Week 5!

Question 1 *Submitted Mar 26th 2022 at 3:46:40 pm*

Which of the following is false about the stack?

- ☐ The value of local variables, provided they are of a primitive data type, can be stored in it (local variables are those declared in a method)
- ☒ The value of instance variables, provided they are of a primitive data type, can be stored in it
- ☐ An array's address can be stored in it
- ☐ An object's address can be stored in it
- ☐ If you think none of the above are false, select this option

Question 2 *Submitted Mar 26th 2022 at 3:46:49 pm*

Which of the following is false about the heap?

- ☐ Object data can be stored in it
- ☐ Array data can be stored in it
- ☒ Data values of a primitive data type and addresses cannot be stored in it
- ☐ If you think none of the above are false, select this option

Question 3 *Submitted Mar 26th 2022 at 3:50:27 pm*

If two reference variables both refer to the same object which of the following is true?

- ☐ The address of the object will appear once in the stack and its data once in the heap
- ☒ The address of the object will appear twice in the stack and its data once in the heap
- ☐ The address of the object will appear once in the stack and its data twice in the heap
- ☐ The address of the object will appear twice in the stack and its data twice in the heap
- ☐ If you think none of the above are true, select this option

Question 4 *Submitted Mar 26th 2022 at 3:50:48 pm*

Consider the following declaration:

Which of the following is true about the variable d?

- ☐ It can only reference arrays of double with length 10
- ☐ It can only reference arrays of double or float with length 10
- ☐ It can only reference arrays of any numeric type with length 10
- ☒ It can only reference arrays of double of any length
- ☐ If you think none of the above are true, select this option

Question 5 *Submitted Mar 26th 2022 at 3:51:14 pm*

After the following declaration:

How many People objects are there?

- ☐ 11

☐ 10

☐ 1

☒ 0

☐ If you think none of the above are correct, select this option

Question 6 *Submitted Mar 26th 2022 at 3:47:08 pm*

After the following declaration:

How many objects are there?

☐ 11

☐ 10

☒ 1

☐ 0

☐ If you think none of the above are correct, select this option

Question 7 *Submitted Mar 26th 2022 at 3:47:26 pm*

Which of the following is false about Java arrays and ArrayLists?

☐ ArrayList elements cannot be primitive types

☐ It's possible to have a generic ArrayList of Java arrays (try to code it)

☒ It's possible to have a Java array of generic ArrayLists (try to code it)

- ☐ All the elements of any Java array could be assigned to a suitably declared ArrayList
- ☐ If you think more than one of the above are false, select this option

Question 8 *Submitted Mar 26th 2022 at 3:52:05 pm*

Which of the following is NOT true about an array's length?

- ☐ For ArrayLists it can be obtained as the return value of an ArrayList method
- ☒ For Java arrays it can be obtained as the return value of a Java array method
- ☐ For Java arrays and ArrayLists the highest index of an array = the number of elements in the array - 1
- ☐ The length of an ArrayList can be changed after its declaration
- ☐ The length of a Java array cannot be changed after its declaration
- ☐ If you think all of the above are true, select this option

Question 9 *Submitted Mar 26th 2022 at 3:51:45 pm*

Given the following declarations:

and the fact that both these arrays have been assigned non-empty elements at their 0th index which of the following has valid syntax?

- ☐ `aList.add[a[0]];`
- ☒ `aList.add(a[0]);`
- ☐ `aList.add[a(0)];`

- ☐ `aList.add(a(0));`
- ☐ `a[0] = aList.get[0];`
- ☐ If you think more than one of the above has valid syntax, select this option

Question 10 *Submitted Mar 26th 2022 at 3:47:55 pm*

The format string in a `String.format` method call contains 10 percent (`%`) symbols. This includes two occurrences of adjacent percent symbols (`%%`).

How many parameters, in total, are there in the `String.format` call?

- ☐ 11
- ☐ 10
- ☐ 9
- ☐ 8
- ☒ 7
- ☐ 6
- ☐ If you think none of the above are the correct number of parameters, select this option