

CS239

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Reading Quiz (1/3)

Which of the following is true of abstract classes in Java?

- 1 Abstract classes cannot be instantiated.
- 2 Abstract classes may not include any implemented methods.
- 3 Java does not include abstract classes, only abstract methods.

Reading Quiz (2/3)

Which of the following is true of abstract methods in Java?

- 1 Abstract methods must be static.
- 2 All methods in an abstract class are automatically abstract.
- 3 Abstract methods must be overridden in subclasses.

Reading Quiz (3/3)

What is wrong with the following class declaration?

```
1 public abstract class Person {  
2  
3     private String name;  
4     private abstract int age;  
5  
6     // Methods not shown...  
7 }
```

- 1 The declaration of `name` is incorrect. It must be declared abstract.
- 2 The declaration of `age` is incorrect. It isn't possible to declare an instance variable abstract.
- 3 Abstract classes may not have instance variables.

Clicker Question

A)

```
1 // Print the contents of an array, followed by a newline.
2 for (int i = 0; i < array.length; i++)
3 {
4     System.out.println(array[i] + " ");
5     if (i == array.length - 1)
6         System.out.println("\n");
7 }
```

B)

```
1 // Print the contents of an array, followed by a newline.
2 for (int i = 0; i < array.length; i++)
3 {
4     System.out.println(array[i] + " ");
5 }
6 System.out.println("\n");
```

- 1 A) and B) are functionally equivalent. A) is preferable.
- 2 A) and B) are functionally equivalent. B) is preferable.
- 3 A) and B) are not functionally equivalent.

Clicker Question

```
1  if (hour == hourNow &&
2      minute == minuteNow &&
3      second == secondNow)
4  {
5      beep();
6  }
```

```
1  if (hour == hourNow)
2  {
3      if (minute == minuteNow)
4      {
5          if (second == secondNow)
6          {
7              beep();
8          }
9      }
10 }
```

- 1 A) and B) are functionally equivalent. A) is preferable.
- 2 A) and B) are functionally equivalent. B) is preferable.
- 3 A) and B) are not functionally equivalent.