

University of the People
Practice Quizzes Units 1-3
Course: CS 1102

In a for loop, how many times does the update run?

In a for loop, how many times does the update run?

Select one:

- ☐ a. Zero or more times, at the beginning of each iteration.
- ☐ b. At least once, at the end of each iteration.
- ☐ c. Exactly once.
- ☐ d. At least once, at the beginning of each iteration.
- ☒ e. Zero or more times, at the end of each iteration.



Your answer is correct.

See Section 3.4.1 of Eck (2014).

The correct answer is: Zero or more times, at the end of each iteration.

Assume "test" is a Boolean variable. Which of the following expressions is equivalent to "test == false"?

Assume "test" is a boolean variable. Which of the following expressions is equivalent to "test == false"?

Select one:

- ☐ a. test
- ☐ b. test = true
- ☒ c. !test
- ☐ d. test.equals(true)



Your answer is correct.

See Section 3.3.2 of Eck (2014).

The correct answer is: !test

Consider the following Java Program:
What is on line 3?

Consider the following Java program:

```
1 public class HelloWorld {  
2     // My first program!  
3     public static void main(String[] args) {  
4         System.out.println("Hello, World!");  
5     }  
6 }
```

What starts on line 4?

Select one:

- ☐ a. a class definition
- ☐ b. a comment
- ☐ c. a variable declaration
- ☐ d. a method (subroutine) definition
- ☒ e. a statement



Your answer is correct.

Consider the following Java Program: What starts on line 4?

Consider the following Java program:

```
1 public class HelloWorld {  
2     // My first program!  
3     public static void main(String[] args) {  
4         System.out.println("Hello, World!");  
5     }  
6 }
```

What starts on line 4?

Select one:

- ☐ a. a class definition
- ☐ b. a comment
- ☐ c. a variable declaration
- ☐ d. a method (subroutine) definition
- ☒ e. a statement



Your answer is correct.

Which of the following keywords is useful for making a loop that may execute forever or may not execute at all?

Which of the following keywords is useful for making a loop that may execute forever or may not execute at all?

Select one:

- ☐ a. switch
- ☐ b. continue
- ☐ c. do
- ☒ d. while
- ☐ e. break



Your answer is correct.

See Section 3.3.1 of Eck (2014).

The correct answer is: while

Which of the following is NOT an effective strategy when your program does not work?

Which of the following is NOT an effective strategy when your program does not work?

Select one:

- ☐ a. Use a debugger to pause your program while it is running so you can check its state.
- ☐ b. Check each error message generated by the compiler or IDE.
- ☒ c. Make random changes to code that you do not understand until it accidentally works. ✓
- ☐ d. Read through your code and figure out what it does step by step.
- ☐ e. Add debugging statements to output information about the state of your program while it runs.

Your answer is correct.

See Section 3.2.3 of Eck (2014).

The correct answer is: Make random changes to code that you do not understand until it accidentally works.

What is the output of the following Java program?

What is the output of the following Java program?

```
class Sum {  
    static int sum = 0;  
    static void add(int i) { i++; }  
    public static void main(String[] args) {  
        for (int i = 0; i < 10; i++) add(sum);  
        System.out.println(sum);  
    }  
}
```

Select one:

- ☐ a. 9
- ☐ b. 45
- ☒ c. 0
- ☐ d. 10
- ☐ e. 100



Your answer is correct.

Consider the following block of Java code. How many times will it output "Hello"?

Consider the following block of Java code. How many times will it output "Hello"?

```
for (int i = 1; i > 10; i++)  
{  
    System.out.println("Hello");  
}
```

Select one:

- ☒ a. 0
- ☐ b. 9
- ☐ c. 1
- ☐ d. 10
- ☐ e. Way too many!



Your answer is correct.

Notice that the condition is " $i > 10$ ", but " i " starts at 1, so the loop body never executes. See Section 3.4.1 of Eck (2014).

The correct answer is: 0

Which of the following keywords is useful for getting out of an infinite loop?

Which of the following keywords is useful for getting out of an infinite loop?

Select one:

- ☒ a. break
- ☐ b. continue
- ☐ c. do
- ☐ d. switch
- ☐ e. while



Your answer is correct.

See Section 3.3.3 of Eck (2014).

The correct answer is: break

Which of the following keywords is useful for skipping to the next iteration of a loop?

→ The correct answer is Continue.

Which of the following types is not allowed for the expression in a switch statement?
Which one of the following types is not allowed for the expression in a switch statement?

Which one of the following types is not allowed for the expression in a switch statement?

Select one:

- ☐ a. enum
- ☒ b. float
- ☐ c. int
- ☐ d. long



Your answer is correct.

See Section 3.6.1 of Eck (2014).

The correct answer is: float

Consider the following Java Program. What starts on line 1?

Consider the following Java program:

```
1 public class HelloWorld {  
2     // My first program!  
3     public static void main(String[] args) {  
4         System.out.println("Hello, World!");  
5     }  
6 }
```

What starts on line 1?

Select one:

- ☐ a. a comment
- ☐ b. a method (subroutine) definition
- ☒ c. a class definition
- ☐ d. a statement
- ☐ e. a variable declaration



Your answer is correct.

See Section 2.1 of Eck (2014).

Consider the following Java method, which term best describes "static"?

Consider the following Java method, which term best describes "static"?

```
public static void main(String[] args) {  
    System.out.println("Hello, World!");  
}
```

Select one:

- ☐ a. formal parameter
- ☐ b. method call
- ☐ c. actual parameter or argument
- ☒ d. modifier
- ☐ e. return type



Your answer is correct.

Consider the following block of Java code. How many times will it output "Hello"?

Consider the following block of Java code. How many times will it output "Hello"?

```
for (int i = 1; i < 10; i--)  
{  
    System.out.println("Hello");  
}
```

Select one:

- ☐ a. 0
- ☐ b. 9
- ☐ c. 1
- ☐ d. 10
- ☒ e. Way too many!



Your answer is correct.

//

Which of the following can a class NOT be used for?

Which of the following can a class NOT be used for?

Select one:

- ☐ a. a container for static methods (subroutines)
- ☐ b. a container for static variables
- ☒ c. a primitive type
- ☐ d. a type for method parameters
- ☐ e. a type for variables



Your answer is correct.

Primitive types are not classes. See Section 2.3 of Eck (2014).

The correct answer is: a primitive type

What is output by the following Java program?

What is output by the following Java program?

```
class Compute {  
    static int compute() { return 42; }  
    static int compute(int i) { return i+1; }  
    public static void main(String[] args) {  
        System.out.println(compute(compute(0)));  
    }  
}
```

Select one:

- ☐ a. 43
- ☒ b. 2
- ☐ c. 42
- ☐ d. 1
- ☐ e. 0



Your answer is correct.

Each of the individual tasks that a CPU is working on is called:

Each of the individual tasks that a CPU is working on is called:

Select one:

- ☐ a. a message
- ☐ b. an object
- ☐ c. a program counter
- ☐ d. an address
- ☒ e. a thread



Your answer is correct.

See Section 1.2 of Eck (2014).

The correct answer is: a thread

Consider the following Java declaration and assignment statement.

`Float x = y;`

Which of the following types is "y" NOT allowed to be?

Consider the following Java declaration and assignment statement.

`float x = y;`

Which one of the following types is "y" NOT allowed to be?

Select one:

- ☒ a. double
- ☐ b. short
- ☐ c. float
- ☐ d. long
- ☐ e. int



Your answer is correct.

Java automatically converts values from short, int, and long to float. It does not automatically convert double to float. See Section 2.5.6 of Eck (2014).

The correct answer is: double

In a for loop, how many times does the continuation condition run?

In a for loop, how many times does the continuation condition run?

Select one:

- ☐ a. At least once, at the end of each iteration.
- ☐ b. Zero or more times, at the beginning of each iteration.
- ☐ c. Zero or more times, at the end of each iteration.
- ☒ d. At least once, at the beginning of each iteration.
- ☐ e. Exactly once.



Your answer is correct.


See Section 3.4.1 of Eck (2014).

The correct answer is: At least once, at the beginning of each iteration.

In a for loop, how many times does the initialization run?

In a for loop, how many times does the initialization run?

Select one:

- ☐ a. At least once, at the beginning of each iteration.
- ☐ b. At least once, at the end of each iteration.
- ☒ c. Exactly once. 
- ☐ d. Zero or more times, at the beginning of each iteration.
- ☐ e. Zero or more times, at the end of each iteration.

Your answer is correct.

See Section 3.4.1 of Eck (2014).

The correct answer is: Exactly once.

Assume that the variables "x" and "y" both have type "int". Which one of the following is NOT a boolean expression?

Assume that the variables "x" and "y" both have type "int". Which one of the following is NOT a boolean expression?

Select one:

- ☒ a. $x = y$
- ☐ b. $x \geq y$
- ☐ c. $((x > 0) \ \&\& \ (y > 0))$
- ☐ d. $(x > 0) ? (x > y) : (x < y)$



Your answer is correct.

" $x = y$ " is an int assignment statement. The other choices are all legal boolean expressions. See Sections 2.5.4 and 2.5.6 of Eck (2014).

The correct answer is: $x = y$