Quiz 03

Due Sep 16 at 12pm **Points** 10 **Questions** 10 **Time Limit** None

Instructions

There is no time limit, but you may only make one submission.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	23 minutes	10 out of 10

Score for this quiz: **10** out of 10
Submitted Sep 8 at 11:45pm
This attempt took 23 minutes.

Question 1

1 / 1 pts

The following code snippet contains an error. What is the error?

```
int cost = 100;
if (cost > 100);
{
   cost = cost - 10;
}
System.out.println("Discount cost: " + cost);
```

- Logical error: assignment statement does not show equality
- Syntax error: the code won't compile
- Logical error: if statement has a "do nothing" statement

Correct!

- Logical error: use of an uninitialized variable

Question 2

1 / 1 pts

Which of the following statements is true about the `if` statement?

- The `if` and `else` blocks should never be enclosed by curly braces.
- The `if` statement can have only one condition that evaluates to an integer value.

Correct!

- (selected) The `else` block is optional.
- The `if` block is optional.

Question 3

1 / 1 pts

Which of the following conditions tests whether the user has entered an integer value, which will then be assigned to the `value` variable?

```
int value = 0;
Scanner in = new Scanner(System.in);
System.out.print("Value: ");
if (...)
{
  value = in.nextInt();
}
```

- `in.fail`

Correct!

- (selected) `in.hasNextInt()`
- `in.nextInt(floor)`
- `in.nextInt()`

Question 4

1 / 1 pts

Assume the following variables have been declared and given values elsewhere:

```
boolean completedProject;
int programsDone;
double classPercentage;
```

A student (in some other hypothetical course, *not* this one!) will pass programming class if and only if they have a percentage of 70.0% or higher and they have either completed the project or have done 5 or more programs. Which of the following statements assigns the Boolean variable `passProgramming` correctly?

```
passProgramming = (classPercentage >= 0.7) || (programsDone >= 5) ||
(completedProject);
```

Correct!

```
passProgramming = (classPercentage >= 0.7) && (programsDone >= 5 || co
mpletedProject);
```

```
passProgramming = ((classPercentage >= 0.7) && (programsDone >= 5 )) |
| completedProject;
```

```
passProgramming = (classPercentage >= 0.7) && (programsDone >= 5) &&
(completedProject);
```

Question 5

1 / 1 pts

What is the best way to improve the following code fragment?

```
if ((counter % 10) == 0)
{
   System.out.println("Counter is divisible by ten: " + counter);
   counter++;
}
else
{
   System.out.println("Counter is not divisible by ten: " + counter);
   counter++;
}
```

- Shorten the variable names
- Add a semicolon after each closing brace
- Remove the braces to save several lines of code

Correct!

- (•) Move the duplicated code outside of the if-else statement

Question 6

1 / 1 pts

In the _____ loop header, you can include multiple update expressions, separated by commas, but it is not recommended.

- `while`
- `if`
- `do`

Correct!

- (•) `for`

Question 7

1 / 1 pts

Which loop does not check a condition at the beginning of the loop?

I. The `do` loop
II. The `while` loop
III. The `for` loop

- I and III
- III only
- I only
- I and II

Correct!

Question 8

1 / 1 pts

Which of the following statements expresses why the following code is considered bad form?

```
for (rate = 5; years-- > 0; System.out.println(balance))
 . . .
```

I. Unrelated expressions in loop header
II. Doesn't match expected idiom for a `for` loop
III. Loop iteration is not clear

- I, II, and III
- II and III only
- I and II only
- I and III only

Correct!

Question 9

1 / 1 pts

What is the output of the code snippet given below?

```
int i = 0;
while (i != 9)
{
   System.out.print(i + " ");
   i = i + 2;
}
```

- 0 2 4 6 8
- No output
- 10 12 14 16 18 …. (infinite loop)
- 0 2 4 6 8 10 12 14 …. (infinite loop)

Correct!

Question 10

1 / 1 pts

How many times will the following loop run?

```
int i = 0;
while (i < 10)
{
   System.out.println(i);
   i++;
}
```

- 9
- 0
- 8
- 10

Correct!

Quiz Score: **10** out of 10