



Graded quiz unit 3 cs 1102

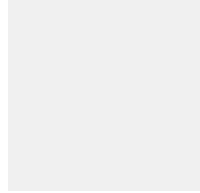
Programming 1 (University of the People)

<b>Marks</b>	20.00/20.00
<b>Grade</b>	<b>100.00</b> out of 100.00

Question **1**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

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.  
short

☐

b.  
float

☒

c.  
double

☐

d.  
long

☐

e.  
int

Feedback

Your answer is correct.

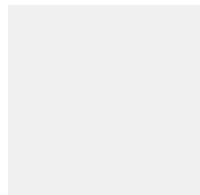
Java automatically converts values from short, int, and long to float. It does not automatically convert double to float. See Section 2.5.6 of Eck (2014).

The correct answer is: double

Question **2**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

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

Select one:

☐

a.

test = true

☐

b.

test.equals(true)

☐

c.

test

☒

d.

!test

Feedback

Your answer is correct.

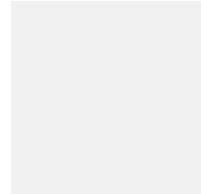
See Section 3.3.2 of Eck (2014).

The correct answer is: !test

Question **3**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

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!

#### Feedback

Your answer is correct.

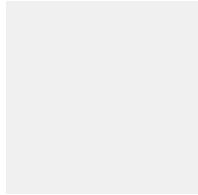
Notice the update, "i--". "i" starts less than 10 and just keeps getting smaller. (The loop is technically not infinite. "i" will eventually reach the most-negative value that "int" can represent, and then it will wrap around to the largest possible "int", ending the loop.) See Section 3.4.1 of Eck (2014).

The correct answers are: 1, Way too many!

#### Question 4

Correct

Mark 1.00 out of 1.00



Flag question

#### Question text

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

Select one:

☐

a.

while

☒

b.

continue

☐

c.

switch

☐

d.

do

☐

e.

break

#### Feedback

Your answer is correct.

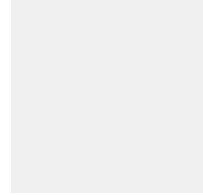
See Section 3.3.3 of Eck (2014).

The correct answer is: continue

Question **5**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Consider the following class definition. Which variables can be used in the missing "println" expression on line 20?

public class PrintStuff

```
2 {
3     public static void main()
4     {
5         {
6             int i = -1;
7             System.out.println(____);
8         }
9         int j = 1;
10        for (j = 0; j < 10; j++) {
11            System.out.println(____);
12        }
13        {
14            int k;
15            for (k = 0; k < 10; k++) {
16                System.out.println(____);
17            }
18        }
19        System.out.println(____);
20    }
21 }
22 }
```

Select one:

☒ a.

Only "j"

☐ b.

Only "k"

☐ c.

"j" and "k"

☐ d.

Only "i"

☐

e.  
"i" and "j"

Feedback

Your answer is correct.

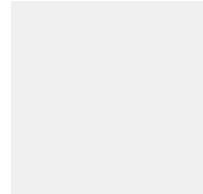
"i" and "k" are no longer in scope. Only "j" is still in scope. See Section 3.1.1 of Eck (2014).

The correct answer is: Only "j"

Question **6**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Consider the following line of Java code.

```
System.out.println("Hello, World!");
```

"Hello ,World" is which of the following?

Select one:

☐

a.  
a class

☐

b.  
a method (subroutine)

☐

c.  
an object

☒

d.  
a parameter

☐

e.  
a statement

Feedback

Your answer is correct.

"Hello, World!" is a parameter passed to the method "println". See Section 2.2.5 of Eck (2014).

The correct answer is: a parameter

Question **7**

Correct

Mark 1.00 out of 1.00

Flag question

Question text

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

Select one:

☒ a.

At least once, at the beginning of each iteration.

☐ b.

Zero or more times, at the end of each iteration.

☐ c.

At least once, at the end of each iteration.

☐ d.

Exactly once.

☐ e.

Zero or more times, at the beginning of each iteration.

Feedback

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.

Question **8**

Correct

Mark 1.00 out of 1.00

Flag question

Question text

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.

2

☐ b.

42

☐ c.

0

☐ d.

43

☐ e.

1

Feedback

Your answer is correct.

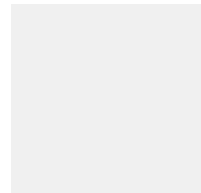
The inner call to "compute" has an argument, so it uses the second method definition, which returns  $0+1$ , or 1. This 1 becomes the argument to the outer call, which then returns  $1+1$ , or 2. The first definition of "compute" is never used. See Section 4.3.3 of Eck (2014).

The correct answer is: 2

Question 9

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Consider the following Java method, which term best describes  
"`System.out.println("Hello, World!")`"?

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

Select one:

☐ a.

return type

☐ b.



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

**Feedback**

Your answer is correct.

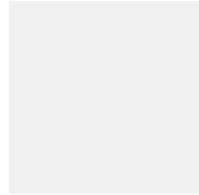
See Sections 2.1 and 4.2.2 of Eck (2014).

The correct answer is: method call

**Question 10**

Correct

Mark 1.00 out of 1.00



Flag question

**Question text**

Which of the following types is NOT a primitive type?

Select one:

- ☐
- a.  
short
- ☐
- b.  
char
- ☒
- c.  
String
- ☐
- d.  
double
- ☐
- e.  
boolean

**Feedback**

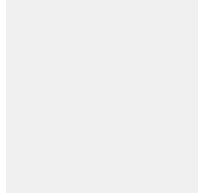
Your answer is correct.

The correct answer is: String

Question **11**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

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 method (subroutine) definition

☒

b.  
a statement

☐

c.  
a variable declaration

☐

d.  
a class definition

☐

e.  
a comment

Feedback

Your answer is correct.

See Section 2.1 of Eck (2014).

The correct answers are: a statement, a class definition

Question **12**

Correct

Mark 1.00 out of 1.00

Flag question

Question text

Which one of the following is used in Java programming to handle asynchronous events?

Select one:

☒

a.  
event handlers

☐

b.  
protocols

☐

c.  
short circuits

☐

d.  
reserved words

☐

e.  
pragmatics

Feedback

Your answer is correct.

The correct answer is: event handlers

Question **13**

Correct

Mark 1.00 out of 1.00

Flag question

Question text

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 statement

☐

c.  
a method (subroutine) definition

☒

d.  
a class definition

☐

e.  
a variable declaration

Feedback

Your answer is correct.

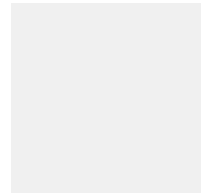
See Section 2.1 of Eck (2014).

The correct answer is: a class definition

Question **14**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

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 is on line 3?

Select one:

☐

a.  
a class definition

☐

b.

a comment

☐ b.

c.

a variable declaration

☐ d.

d.

a statement

☒ e.

e.

a method (subroutine) definition

Feedback

Your answer is correct.

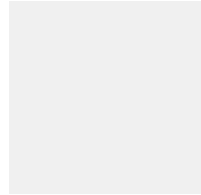
See Section 2.1 of Eck (2014).

The correct answers are: a method (subroutine) definition, a class definition

Question **15**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

1. Consider the following class definition. Which variables can be used in the missing "println" expression on line 12?

```
1 public class PrintStuff
2 {
3     public static void main()
4     {
5         {
6             int i = -1;
7             System.out.println(____);
8         }
9         int j = 1;
10        for (j = 0; j < 10; j++) {
11            System.out.println(____);
12        }
13    }
14    {
15        int k;
16        for (k = 0; k < 10; k++) {
17            System.out.println(____);
18        }
19    }
20    System.out.println(____);
```

```
21 }  
22 }
```

Select one:

☐

a.

1. Only "i"

☐

b.

Only "k"

☐

c.

"j" and "k"

☐

d.

"i" and "j"

☒

e.

Only "j"

Feedback

Your answer is correct.

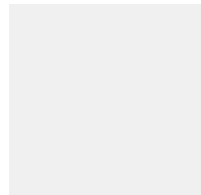
"i" is no longer in scope. "k" has not been declared yet. See Section 3.1.1 of Eck (2014).

The correct answer is: Only "j"

Question **16**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

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

Feedback

Your answer is correct.

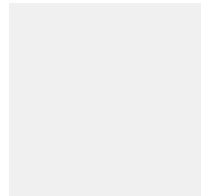
Primitive types are not classes. See Section 2.3 of Eck (2014).

The correct answer is: a primitive type

Question **17**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

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

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

Select one:

☐

a.

actual parameter or argument

☐

b.

method call

☒

c.

modifier

☐

d.

return type

☐

e.

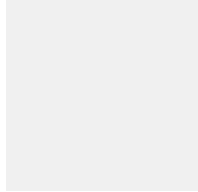
formal parameter

Feedback

Your answer is correct.  
See Section 4.2.1 of Eck (2014).  
The correct answer is: modifier

Question **18**

Correct  
Mark 1.00 out of 1.00



Flag question

Question text

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.

$(x > 0) ? (x > y) : (x < y)$

Feedback

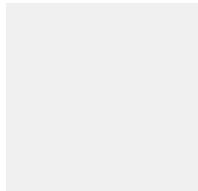
Your answer is correct.

" $x = y$ " 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:  $x = y$

Question **19**

Correct  
Mark 1.00 out of 1.00



Flag question

Question text

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

Select one:

☐



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

Feedback

Your answer is correct.

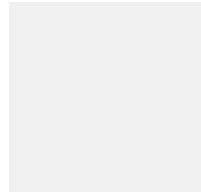
See Section 3.4.1 of Eck (2014).

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

Question **20**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which of the following keywords is useful for loops that should always execute at least once?

Select one:

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

e.  
continue

Feedback

Your answer is correct.

See Section 3.3.2 of Eck (2014).

The correct answer is: do