

CSA WS 07I (Practice)

Started: Oct 28 at 8:05pm

Quiz Instructions

2 attempts allowed

Highest score counted

Question 1

100 pts

What will be the value of `x` after the following code is executed?

```
int x = 75;  
int y = 60;  
if (x > y)  
    x = x - y;
```

☒ 15

☐ 60

☐ 135

☐ 75

Question 2

100 pts

What will be the value of `ans` after the following code is executed?

```
int ans = 10;  
int x = 65;  
int y = 55;  
if (x >= y)  
    ans = x + y;
```

- ☐ 100
- ☐ 10
- ☒ 120
- ☐ No value, there is a syntax error

Question 3

100 pts

What will be the value of `ans` after the following code is executed?

```
int x = 90, y = 55, ans = 10;  
if ( x == y );  
    ans *= 2;
```

- ☒ 10
- ☐ 20
- ☐ No value, there is a syntax error
- ☐ 145

Question 4**100 pts**

If `chr` is a variable of type `char`, which of the following `if` statements is written correctly?

- ☒ `if (chr == 'a')`
- ☐ `if (chr.equals('a'))`
- ☐ `if (chr.equals("a"))`
- ☐ `if (chr == "a")`

Question 5**100 pts**

What will be the value of `ans`, `x`, and `y` after the following code is executed?

```
int ans = 35, x = 50, y = 50;
if ( x >= y)
{
    ans = x + 10;
    x -= y;
}
else
{
    ans = y + 10;
```

```
y += x;  
}
```

- ☐ ans = 45, x = 50, y = 50
- ☐ ans = 60, x = 50, y = 100
- ☐ ans = 45, x = 50, y = 0
- ☒ ans = 60, x = 0, y = 50
- ☐ No value, this is a syntax error

Question 6

100 pts

What will be the value of `bonus` after the following code is executed?

```
int bonus, sales = 10000;  
if (sales < 5000)  
    bonus = 200;  
else if (sales < 7500)  
    bonus = 500;  
else if (sales < 10000)  
    bonus = 750;  
else if (sales < 20000)  
    bonus = 1000;  
else  
    bonus = 1250;
```

- ☐ 500
- ☐ 1250
- ☒ 1000
- ☐ 750
- ☐ 200

Question 7**100 pts**

If you prematurely terminate an `if` statement with a semicolon, what does the compiler do?

I	displays an error message
II	does not display an error message
III	assumes that there is nothing to do when the condition is true

- ☐ I and III only
- ☐ I only
- ☐ III only
- ☐ II only
- ☒ II and III only

Question 8**100 pts**

What will be the value of `bonus` after the following code is executed?

```
int bonus, sales = 1250;
if (sales > 1000)
    bonus = 100;
if (sales > 750)
    bonus = 50;
if (sales > 500)
    bonus = 25;
else
    bonus = 0;
```

☐ 1250☐ 25☐ 0☐ 500☒ 100**Question 9****100 pts**

What will be the value of `bonus` after the following code is executed?

```
int bonus, sales = 85000;
```

```
char dept = 'S';
if (sales > 100000)
    if (dept == 'R')
        bonus = 2000;
    else
        bonus = 1500;
else if (sales > 75000)
    if (dept == 'R')
        bonus = 1250;
    else
        bonus = 1000;
else
    bonus = 0;
```

- ☐ 1500
- ☐ 1250
- ☐ No value, this is a syntax error
- ☐ 2000
- ☒ 1000

Question 10

100 pts

Which of the following is the correct `boolean` expression to test for: `int x` being a value between, but not including, 500 and 650, or `int y` not equal to 1000?

- ☐ `((x >= 500 && x <= 650) && (y != 1000))`
- ☒ `((x > 500 && x < 650) || (y != 1000))`
- ☐ `((x < 500 && x > 650) || !(y == 1000))`
- ☐ `((x > 500 AND x < 650) OR !(y.equals(1000)))`

Question 11**100 pts**

_____ works like this: If the expression on the left side of the `&&` operator is `false`, the expression the right side will not be checked?

- ☐ Boolean logic
- ☐ Reverse logic
- ☒ Short-circuit evaluation
- ☐ Mathematical logic

Question 12**100 pts**

What would be the value of `x` after the following statements were executed?

```
int x = 10;
switch (x)
```



```
{  
    case 10:  
        x += 15;  
    case 12:  
        x -= 5;  
        break;  
    default:  
        x *= 3;  
}
```

- ☐ 5
- ☐ 30
- ☐ 25
- ☐ No value, this is a syntax error
- ☒ 20

Question 13**100 pts**

What is the value of `x` after the following code has been executed?

```
int x = 75;  
int y = 90;  
if ( x != y)  
    x += y;
```

- ☐ 90
- ☒ 165
- ☐ No value, this is a syntax error
- ☐ 15
- ☐ 75

Question 14**100 pts**

What is the value of `ans` after the following code has been executed?

```
int x = 40;  
int y = 40;  
int ans = 0;  
if (x = y)  
    ans = x + 10;
```

- ☐ 30
- ☐ 40
- ☐ 80
- ☐ 50
- ☒ No value, this is a syntax error

Question 15**100 pts**

What is the value of `ans` after the following code has been executed?

```
int x = 35;  
int y = 20, ans = 80;  
if (x < y);  
    ans += y;
```

- ☒ 100
- ☐ 55
- ☐ No value, this is a syntax error
- ☐ 80
- ☐ 35

Question 16**100 pts**

Which of the following correctly tests the `char` variable `chr` to determine whether it is NOT equal to the character B?

- ☒ `if (chr != 'B')`
- ☐ `if (chr <> 'B'))`
- ☐ `if NOT(chr.equals('B'))`

☐ `if NOT(chr = 'B')`

☐ `if !(chr = 'B')`

Question 17

100 pts

In an `if-else` statement, if the condition in the `if` part is `false`, then

- ☒ the first statement or first block following `else` is executed
- ☐ the first statements/blocks following `if` and `else` are executed
- ☐ the first statement or first block following `if` is executed
- ☐ no statements/blocks following `if` or `else` are executed

Question 18

100 pts

What will be the values of `ans`, `x`, and `y` after the following statements are executed?

```
int ans = 0, x = 15, y = 25;
if ( x >= y)
{
  ans = x + 10;
  x -= y;
}
```

```
else
{
ans = y + 10;
y += x;
}
```

- ☐ ans = 25, x = 15, y = 40
- ☒ ans = 35, x = 15, y = 40
- ☐ ans = 25, x = -10, y = 25
- ☐ ans = 0, x = 15, y = 25

Question 19

100 pts

What will be the values of `discountRate` after the following statements are executed?

```
double discountRate = 0.0;
int purchase = 100;
if (purchase > 1000)
    discountRate = .05;
else if (purchase > 750)
    discountRate = .03;
else if (purchase > 500)
    discountRate = .01;
```

- ☐ 0.05

☐ 0.01☐ 0.03☒ 0.0**Question 20****100 pts**

What will be the values of `discountRate` after the following statements are executed?

```
double discountRate = 0.0;
int purchase = 1250;
if (purchase > 1000)
    discountRate = .05;
if (purchase > 750)
    discountRate = .03;
if (purchase > 500)
    discountRate = .01;
else
    discountRate = 0;
```

☐ 0.0☐ 0.03☒ 0.05☐ 0.01

Question 21**100 pts**

What will be the values of `discountRate` after the following statements are executed?

```
double discountRate = 0.0;
int purchase = 1250;
char cust = 'N';
if (purchase > 1000)
    if (cust == 'Y')
        discountRate = .05;
    else
        discountRate = .04;
else if (purchase > 750)
    if (cust == 'Y')
        discountRate = .04;
    else
        discountRate = .03;
else
    discountRate = 0;
```

☐ 0.05☒ 0.04☐ 0.03☐ 0.0

Question 22**100 pts**

Write a `boolean` expression to test for: `int x` being a value less than or equal to 500 or greater than 650, and `int y` not equal to 1000.

- ☐ `((x >= 500 && x < 650) && (y != 1000))`
- ☐ `((x <= 500 OR x > 650) AND !(y.equal(1000)))`
- ☐ `((x >= 500 || x < 650) || (y != 1000))`
- ☒ `((x <= 500 || x > 650) && !(y == 1000))`

Question 23**100 pts**

What will be printed when the following code is executed?

```
int y = 10;
if ( y == 10)
{
    int x = 30;
    x += y;
}
System.out.print("x = ");
System.out.print(x);
```

- ☒ `x` is unknown when the last statement is executed

☐ x = 30☐ x = 20☐ x = 40**Question 24****100 pts**

The `switch` statement is a ____.

☒ multiple alternative decision structure☐ nested decision structure☐ sequence structure☐ test expression**Question 25****100 pts**

What would be the value of `discountRate` after the following statements are executed?

```
double discountRate;  
char custType = 'B';  
switch (custType)  
{
```

```
case 'A':  
    discountRate = 0.08;  
    break;  
case 'B':  
    discountRate = 0.06;  
case 'C':  
    discountRate = 0.04;  
default:  
    discountRate = 0.0;  
}
```

- ☒ 0.0
- ☐ 0.04
- ☐ 0.08
- ☐ 0.06

No new data to save. Last checked at 8:10pm

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