



# Peer Instruction #12: Java Review



# Operator Precedence, Integer Math

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What is the value of the variable *answer* after the following code is executed?

```
int answer = 12 + 9 / 4 - 2 + 52 / 2 % 3 * 2;
```

A. 12

B. 14

C. 16

D. 18

E. None of the above



# Conditional Execution: if/else statement

What are the values of *salary* and *taxes* after execution of the following code?

```
double taxes, salary = 50000.0;
```

```
if (salary > 15000.0)
```

```
    taxes = salary * 0.40;
```

```
else
```

```
    taxes = salary * 0.30;
```

```
    salary -= 25000.00;
```

A. 50000.0, 20000.0

B. 50000.0, 15000.0

C. 25000.0, 20000.0

D. 25000.0, 15000.0

E. None of the above!

If Else Statement



# Conditional Execution: switch statement

What is the value of the variable count at the end of the following code?

```
int count = 2;  
char c = '&';  
switch (c) {  
    case '&': count=5;  
    case '%': count--;  
}
```

- A. count is 1
- B. count is 2
- C. count is 3
- D. count is 4
- E. count is 5



# Iterative Execution: for loop

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What does the following code print?

```
int i;  
for(i=6; i<=10;i++);  
System.out.println("i is " + i);
```

A. i is 6

B. i is 9

C. i is 10

D. i is 11

E. Will not compile.



# File Input: Scanner Methods

Given the file contents (red) and code (black), what values are assigned? Assume *in* is a suitable Scanner.

**1.2**

**hello there**

**34**

**double x = in.nextDouble();**

**String s = in.nextLine();**

**double y = in.nextDouble();**

A. 1.2, "hello there", 34.0

B. 1.2, "hello", 34.0

C. 1.2, "", 34.0

D. Will not compile.

E. Throws exception!



# 1D Arrays: Parameter Passing

What are the values of the elements of the integer array array after the following code?

```
int array[] = {3, 4, 5, 6, 7};  
myMethod(array);  
static void myMethod(int a[]) {  
    for (int i=1; i<a.length-1; i++)  
        a[i] /= 2;  
}
```

- A. 3, 4, 5, 6, 7
- B. 1, 2, 2, 3, 3
- C. 3, 2, 2, 3, 3
- D. 1, 2, 2, 3, 7
- E. 3, 2, 2, 3, 7

Array Modification



# 2D Arrays: Accessing Elements

What is the value of `cArray[2][1]` after the following code has executed?

```
char cArray[][] = new char[3][3];  
for (int i = 0; i < 3; i++)  
    for (int j = 0; j < 3; j++)  
        cArray[i][j] = (char) ('c' + j - i);
```

- A. 'a'
- B. 'b'
- C. 'c'
- D. 'd'
- E. 'e'





# Classes, Methods, Data

What does the following code print?

```
public class Peer {  
    static int i = 12;  
    int j = 23;  
    public static void main(...) {  
        Peer p1 = new Peer();  
        Peer p2 = new Peer();  
        p1.i++; p1.j = 34; p2.i++; p2.j = 45;  
        System.out.println(p1.i+" "+p1.j+" "+p2.i+" "+p2.j);  
    }  
}
```

- A. 13 34 14 45
- B. 13 45 14 45
- C. 14 34 14 45
- D. 14 45 14 45
- E. Will not compile