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1. Before you can effectively code in Java, you need to be able to understand what your code does. Try to solve the following problems in this quiz by hand!

Consider the following BlueJ program.

```
1 public class Mystery {  
2  
3 /**  
4  * read file of mysterious phrases  
5  */  
6  
7 public void DoSomething() {  
8     // initialize instance variables  
9     FileResource someFile = FileResource("phrases.txt");  
10    for (String phrase : someFile.lines()){  
11        System.out.println(phrase);  
12    }  
13 }  
14 }
```

Which one of the following is the name of a method?

- ☐ Mystery
- ☐ phrase
- ☐ someFile
- ☐ DoSomething

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2. Consider the following Java class.

```
1 public class Thing {  
2  
3     private int a;  
4  
5     public Thing(int x) {  
6         a = x;  
7     }  
8  
9     public int geta() {  
10        return a;  
11    }  
12  
13    public void print() {  
14        int b = 4;  
15        System.out.println(geta() + " " + b);  
16    }  
17 }
```

Which method is the constructor?

- ☐ Thing
- ☐ print
- ☐ a
- ☐ geta

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3. Consider the following class named Something that uses the edu.duke FileResource class.

```
1 public class Something {  
2  
3     public void run() {  
4         FileResource f = new FileResource("words.txt");  
5         for (String g : f.lines()) {  
6             System.out.println(g);  
7             System.out.println(g);  
8         }  
9     }  
10 }
```

Suppose the file words.txt contains the following lines:

cat giraffe

bird

zebra

How many times is the for loop executed?

Hint: Be sure to review the documentation for FileResource if you do are not sure what this class does or what methods it contains:
<http://www.dukelearntoprogram.com/course2/doc/>.

Enter answer here

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4. Consider the following Java code segment.

```
1 int m = 7 ;  
2 int n = 9 ;  
3 double d = 4.5 ;  
4 double f = 8.974 ;
```

Which one of the following arithmetic expressions would need a cast for the addition to work? (Hint: Review the video on **Types** if you are unsure what casting variables means.)

- ☐ 1 int x = m + n ;
- ☐ 1 int y = n + f ;
- ☐ 1 double w = d + f ;
- ☐ 1 double z = m + f ;

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5. Consider the Thing class shown below.

```
1 public class Thing {  
2  
3     private int a;  
4  
5     public Thing(int x) {  
6         a = x;  
7     }  
8  
9     public int geta() {  
10        return a ;  
11    }  
12  
13    public void combine (Thing y) {  
14        a = a + y.geta();  
15    }  
16 }
```

And consider the following code segment that uses the Thing class.

```
1 Thing f = new Thing(6);  
2 Thing g = new Thing(8);  
3 f.combine(g);  
4 System.out.println(f.geta());  
5 System.out.println(g.geta());
```

What is printed when this code is executed?

- ☐ 6
- ☐ 14
- ☐ 6
- ☐ 8
- ☐ 14
- ☐ 14
- ☐ 8

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