

Rewrite the following `switch` statement as a sequence of `if/else` statements that produce the equivalent functionality.

```
String input = JOptionPane.showInputDialog("Enter an integer"); // don't copy
int num = Integer.parseInt(input); // don't copy
String answer = "Visualize"; // don't copy
switch(num) {
    case 0:
        answer = "whirled";
        break;
    case 2:
    case 4:
        answer = "peas";
        break;
    default:
        answer = "now";
}
```

Complete the following program. The program should generate 100 pairs of random numbers. Each pair should consist of two uniformly distributed random `double` values between 0.0 and 1.0. Whenever the pair of numbers differs by less than 0.001, the values should be displayed to in the console.

You may use the provided API reference for the `java.util.Random` class.

```
import java.util.Random;

public class Quiz5 {
    public static void main(String[] args) {
```

Implement the `toString` method from the `Complex` class we have been developing in lecture this week. Your implementation should result in complex numbers being represented as follows:

```
2.0 + i5.8
```

```
-2.0 - i5.8
```

```
3.8          <-- here the imaginary part is 0.0
```



Complete the method below that accepts an array of integers and increments all of the even values in the array. For example, 0, 8, 3 should be changed to 1, 9, 3.

```
public static void quiz8(int[] nums) {
```



Write a method that accepts an `ArrayList` of integers and returns the sum of the even values in the array. For example, `0, 3, 8` should return `8` and `1, 3, 9` should return `0`.