Solutions to Java Lab 1

1. Correct the following statements:
```
a) boolean isGood = 1;          boolean isGood = true;
b) char firstLetter = p;        char firstLetter = 'p';
c) int 2way = 89;               int twoWay = 89;
d) String name = Zahir;         String name = "Zahir";
e) int student score = 89;      int player_score = 89;
f) Double $class = 4.5;         double $class = 4.5;
g) int _parents = 20.5;         double _parents = 20.5;
h) string name = "Greg";        String name = "Greg";
```

3. Create a new Java file with a class called `UsingOperators` and copy the above main method into it. (Can you figure out what the name of the Java file must be? Hint: see step 10 of Lab 0.) Compile and run. Does the output match what you thought?

```
The value of z is 17
The value of w is 27
The value of z is now 30
The value of z is 28
The value of z is 29
The value of z is 28
c is false
```

4. Create a new Java class called `TempConverter`. Add a `main` method to `TempConverter` that declares and initializes a variable to store the temperature in Celsius. Your temperature variable should be store numbers with decimal places.

5. In the `main` method, compute the temperature in Fahrenheit according to the following formula and print it to the screen: `Fahrenheit = (9 ÷ 5) × Celsius + 32`

```java
public class TempConverter {
    public static void main(String[] args) {
        double celcius = 100.0;
        double fahrenheit = (9.0 / 5.0) * celcius + 32;
        System.out.println(fahrenheit);
    }
}
```

7. Set the Celsius variable to 100 and compile and run `TempConverter`. The correct output is 237.6. If your output was 132, you probably used integer division somewhere by mistake.

if both 9 and 5 are used instead of 9.0 and 5.0 in the formula, then the program will print out the incorrect answer of 132

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