

1. Create an instance of the following class.

```
class Student
{
    public Student()
    {
    }
}
```

2. Create an instance of the following class.

```
class Oven
{
    int temperature;
    public Oven(int temperature)
    {
        //stuff..
    }
}
```

3. Write a constructor for the following class.

```
class Animal
{

    boolean hasFur;
    int numLegs;

}
```

4. List all the JComponents you can think of.

5. Add a listener to each of these objects:

a) `JPanel panel = new JPanel();`

b) `JFrame frame = new JFrame("my window");`

c) `JButton button = new JButton();`

6. Write a method that receives two integers and returns the average of those two integers.

7. Call the following method with a value of 2.

```
int squareNum(int value)
{
    return value * value;
}
```

8. Write a method called `annoy` that takes a `String` as a parameter and prints that `String` three times.

9. Given the following code, create a `Smurf` and set its name.

```
public class Smurf {
    String name;
```

```

boolean wearsARedHat;

Smurf(boolean wearsRedHat) {
    this.wearsARedHat = wearsRedHat;
}

void setName(String name) {
    this.name = name;
}
}

```

10. Circle the errors in the following code.

```

class Animal {
    String numLegs;
    Animal(int numLegs) {
        numLegs = numLegs;
        checkLegs();
    }
    void checkLegs(int legs) {
        if(legs < 0) {
            System.out.println("That is not an animal.");
        }
        else if(legs = 0) {
            System.out.println("It must be a snake.");
        }
        else if {
            System.out.println("I think it's a mammal.");
        }
    }
}

```

11. Convert this binary number to a base 10 number.

101101

12. Convert this base 10 number to binary.

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13. Create a class named Dog with 2 member variables and a getter and setter for each one.