Tutorial Week 2

Our readings (lecture notes and video lecture) this week discuss about **Review of Object Oriented Programming**. Write the answers for all questions in the table according to your understanding.   **PLEASE USE YOUR OWN WORDS. DO NOT COPY FROM THE WEB.**

Question	Answer
1. Describe the relationship between an object and its defining class. How do you declare a class? How do you declare an object? How do you declare and create an object in one statement?	
2. Explain the difference between constructors and methods.	
3. What is wrong with the following program?	

```java
public class Test {

    public static void main (String args[]){
        Test a = new Test();
        a.print();
    }


    class A {
        String s;

        A(String s) {
            this.s=s;
        }

        public void print(){
            System.out.println(s);
        }
    }
}
```

4. What is the printout of the following code?
 	
``java
public class HelloJavaEE {
 	
    private boolean x;
 	
    public static void main (String args[]){
        HelloJavaEE hello = new HelloJavaEE ();
        System.out.println(hello.x);
    }
 	
}
``	

5. In the following code, radius is private in the Circle class, and myCircle is an object of the Circle class. Does the following code cause any problems? Explain why.
 	
``java
public class Circle {
 	
    public double radius = 1.0;
 	
    double getArea() {
        return radius * radius * Math.PI;
    }
 	
    public static void main(String args[]) {
        Circle myCircle = new Circle();
        System.out.println("Radius is" + myCircle.radius);
    }
 	
}
``	

6. How many objects of a given class may be constructed in a project?	

7. Examine the following section of code.
 	
``java
String xyz= new String("white");
xyz = new String ("blue");
xyz = new String ("green");
xyz = new String ("pink");
xyz = new String ("purple");
``
 	
How many objects are created? How many objects are accessible?	

8. Examine the following section of code.

```
String xyz = New String ("white");

String xyy= new String ("blue");

String xyx= new String ("green");

String xzz= new String ("pink");

String xxz= new String ("purple");
```

How many objects are created? How many objects are accessible?