CSC 111 Problem Set 1

1. Correct the errors in the following code:

```java
public class Rectangle
    public int height
    public int width;

}
public class Problem1 {
    public static void main (String args[]){
        Rectangle a;
        System.out.println("Height of a:" + a.height);
        Rectangle b = New Rectangle();
        Rectangle c = 10.0;
        double d = 10.0;
        rectangle e = new Rectangle()
        e = d;
    }
}
```

2. Create a class that corresponds to the following class diagram, then in another class under a main method declare an Employee object then initialize the name with Ahmad Ali, age with 33 and salary with 12000:

```
+ name : String
+ age : int
+ salary : double
```

3. What is the output of the following program:

```java
public class Problem3 {
    public static void main (String args[]){
        C a = new C();
        C b = new C();
        a.x = 1;
        a.y = 2;
        b = a;
        b.x++;  
        b.y++;
        System.out.println("a: x = " + a.x + " y = " + a.y );
        System.out.println("b: x = " + b.x + " y = " + b.y );
    }
```
4. Given the following class diagram, create the class `Book`, then in another class under a main method create a `Book` object, and then create a statement that prints the information of a that `Book` object.