

### **Programming Assignment 5: Recursion**

```
public class RecursionDemo {  
  
    public static int x = 0;  
  
    static void p(){  
        System.out.println("The next number is: " + x);  
        x=x+1;  
        p();  
    }  
    public static void main(String[] args) {  
        p();  
    }  
}
```

### **Programming Assignment 5a: Recursion - Receiving an outside value**

```
public class RecursionDemo2 {  
  
    public static int x = 0;  
  
    static void p(int y){  
        System.out.println("The next number is: " + x);  
        x=x+y;  
        p(y);  
    }  
  
    public static void main(String[] args) {  
        p(5);  
    }  
}
```

### **Programming Challenge 5:**

```
import java.util.Scanner;
```

```

public class CounterBy10s
{

    public static void counter10(int max, int n)
    {

        if (n > max)
            return;
        else
        {
            System.out.println("The next number is: " + n);
            counter10(max, n+10);
        }

    }

    public static void main(String[] args)
    {

        Scanner sc = new Scanner(System.in);

        System.out.println("Please enter the max amount you want your number to go up
to: ");
        int userM= sc.nextInt();

        System.out.println("Please enter the number you want to start counting 10s
from:");
        int userN = sc.nextInt();

        counter10(userM, userN);

    }

}

```