

Directions: 1st read pages 235 -237 in your Barron's pdf (see school loop locker). Then do the following minilabs in Eclipse and submit.

Math class, especially the Random method of the math class (pages 235-237). Basically try to figure out how to produce a random integer (0 -5 or 3-10 for example).

Random Programs ☺:

Minilab#1:

Complete the program that rolls two dice and adds the sum of the die . So you may have an output like: //no for loops needed for this one

example Die 1: 5

Die 2: 1

Sum: 6

Code + Output:

Code:

```
public class Minilab1 {  
    public static void main(String []args)  
    {  
        int sum;  
        int die1;  
        int die2;  
  
        die1 = (int) (Math.random() * 5) +1;  
  
        die2 = (int) (Math.random() * 5) + 1;  
  
        System.out.println("Die 1: "+die1);  
        System.out.println("Die 2: "+die2);  
  
        sum = die1 + die2;  
  
        System.out.println("Sum: "+sum);  
    }  
}
```

Output:

Die 1: 3
Die 2: 4
Sum: 7

MiniLab#2: Write a section of code that sums 100 random integer values ranging from 10 to 30.

//Your Code and Sum Output here

Code:

```
public class MiniLab2 {
    public static void main(String [] args)
    {
        int value;
        int sum = 0;
        for(int x = 0; x < 100; x++)
        {
            value = (int) (Math.random()*20) + 10;
            sum += value;
        }

        System.out.println("Total Sum: "+sum);
    }
}
```

Output:

Total Sum: 1934

MiniLab#3:

Ask the user to give you the range – and then produce 10 random numbers from that range. Example

enter number 1: 6 enter number2: 13 (your program would print 10 random numbers inclusive from 6 - 13). example: 8, 6, 8, 9, 13 etc.

copy/paste code and output

```
public class MiniLab3 {
    public static void main(String [] args)
    {
        Scanner scan = new Scanner(System.in);
        double number = 0;

        System.out.println("Enter the lower number for the range");
        int lower = scan.nextInt();

        System.out.println("Enter the upper number for the range");

        int upper = scan.nextInt();

        for(int x = 0; x < 10; x++)
        {
            number = (int)((upper-lower)* Math.random() + lower);
        }
    }
}
```

```
        System.out.println(number+" ");
    }

}
```

Enter the lower number for the range

6

Enter the upper number for the range

13

6.0,
11.0,
10.0,
9.0,
11.0,
9.0,
12.0,
7.0,
6.0,
8.0,