

\*\*\*\*\* OUTPUT \*\*\*\*\*

135 should have evaluated true

```
Following number will be checked: 135
```

```
this is length of num:3
```

```
This is digit: 5
```

```
this is length of num:2
```

```
This is digit: 3
```

```
this is length of num:1
```

```
This is digit: 1
```

```
this is length of num:1
```

```
This is digit: 1
```

```
this is length of num:2
```

```
This is digit: 3
```

```
this is length of num:1
```

```
This is digit: 1
```

```
this is length of num:1
```

```
This is digit: 1
```

```
Number is isDisarium: False
```

```
** Process exited - Return Code: 0 **
```

It was expected num==0  
here and stop  
While loop in code is also  
pre-test loop, so unsure why  
it reached here

135 should have  
evaluated true, but it  
showing false

```
while (num!=0)  
{
```

```
pos=Integer.toString(num); // this converts the number to a string  
System.out.println("this is length of num:" + pos.length());  
position = Integer.valueOf(pos.length());
```

```

Following number will be checked: 75
this is length of num:2
This is digit: 5

this is length of num:1
This is digit: 7

this is length of num:1
This is digit: 7

Number is isDisarium: False

** Process exited - Return Code: 0 **

```

It was expected num==0 here and stop  
While loop in code is also pre-test loop, so unsure why it reached here

75 should have evaluated false, it does evaluate false but it is not expected to run the execution shown.

### \*\*\* CODE \*\*

```

import java.lang.Math.*;

public class Main
{
    static int Total=0;

    public static int isDisarium(int num)
    {

        int digit;

        int numberDigits=0;
        String pos="";
        int position;

        while (num!=0)
        {

            pos=Integer.toString(num); // this converts the number to a string
            System.out.println("this is length of num:" + pos.length());

```

```

position = Integer.valueOf(pos.length());

digit = num%10;
System.out.println("This is digit: " + digit + "\n");

// System.out.println(numberDigits); // this is no good since it loses track of this variable

num=num/10; // this will drop off last digit

Total = (int)Math.pow(digit,position) + isDisarium(num);

}

return Total;
}

public static void main(String[] args) {

    int num=75;

    System.out.println("Following number will be checked: " + num);

    String outcome = isDisarium(num)==num ? "True":"False";

    System.out.println("Number is isDisarium: " + outcome);

    }
}

```