Add if a digit

Take in a character as an input from the user

a. If the entered character is a **digit**, then add **100** to the value of the digit entered and print the final answer

Convert the digit which is added as a character data-type into the integer data-type using two ways,

```
First: By using [Use the in-built function Character.getNumericValue]

Second using: By manipulating the digit character data-type into the integer data-type.
```

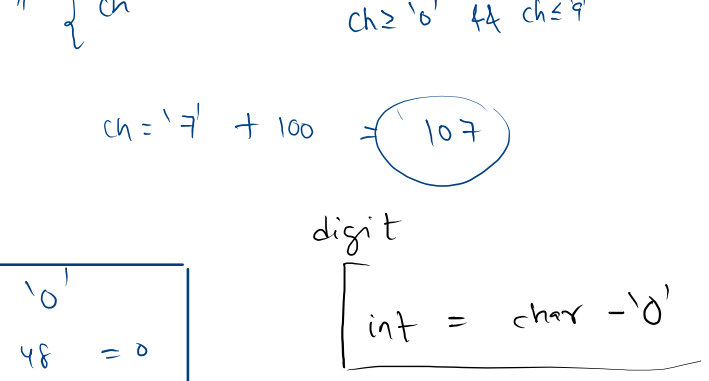
b. Else print **This is not a digit**

Sample Input 0

```
7
```

Sample Output 0

```
107
```



```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        char ch = scn.next().charAt(0);

        if(ch >= '0' && ch <= '9'){
            int val = ch - '0';
            System.out.println(val+100);
        }else{
            System.out.println("This is not a digit");
        }
    }
}
```

```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        char ch = scn.next().charAt(0);

        if(ch >= '0' && ch <= '9'){
            int val = Character.getNumericValue(ch);
            // int val = ch - '0';
            System.out.println(val+100);
        }else{
            System.out.println("This is not a digit");
        }
    }
}
```

A – 65
B – 66
C – 67
D – 68
E – 69
F – 70
G – 71
H – 72
I – 73
J – 74
K – 75
L – 76
M 77
N 78
O 79
P 80
Q 81
R 82
S 83
T 84
U 85
V 86
W 87
X 88
Y 89
Z 90

a 97
b 98
c 99
d 100
e 101
f 102
g 103
h 104
i 105
j 106
k 107
l 108
m 109
n 110
o 111
p 112
q 113
r 114
s 115
t 116
u 117
v 118
w 119
x 120
y 121
z 122

'F' - 'A' = 5

'f' - 'a' = 5

'E' - 'A' = 4

'e' - 'a' = 4

'F' - 'A' = 'f' - 'a'

'CH' - 'A' = 'ch' - 'a'

eg.

E → e

ch = CH - 'A' + 'a'

e → E

CH = ch - 'a' + 'A'

Toggle the character

e → E

```java
public class Main
{
    public static void main(String[] args) {
       // CH - 'A' = ch - 'a'

        char ch = 'e';       //convert to E
        char CH = (char)(ch - 'a' + 'A');
        System.out.println(CH);
    }
}
```

E → e

```java
public class Main
{
    public static void main(String[] args) {
       // CH - 'A' = ch - 'a'

        char CH = 'E';       //convert to E
        char ch = (char)(CH - 'A' + 'a');
        System.out.println(ch);
    }
}
```

Toggle the character

```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        char x = scn.next().charAt(0);
        //CH - 'A' = ch - 'a'


        if(x >= 'a' && x <= 'z'){           // e -> E
            System.out.println((char)(x - 'a' + 'A'));
        }else if(x >= 'A' && x <= 'Z'){     // E -> e
             System.out.println((char)(x - 'A' + 'a'));
        }
    }
}
```

Type Casting.

int → char

```java
public class Main
{
    public static void main(String[] args) {
        int v = 65;
        char c = (char)v;
        System.out.println(c);
    }
}
```

A

65 → 'A'

Explicit TC

char → int

```java
public class Main
{
    public static void main(String[] args) {
        char c = 'A';
        int v = c;
        System.out.println(v);
    }
}
```

65

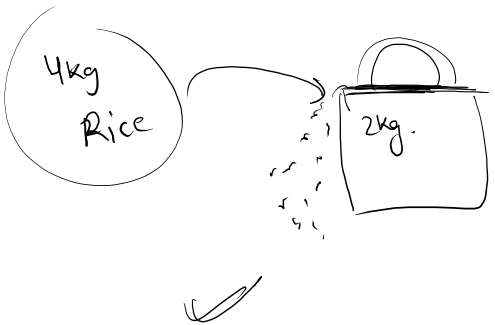
'A' → 65

Implicit TC

int → 4 4 → 2

char → 2

2 → 4



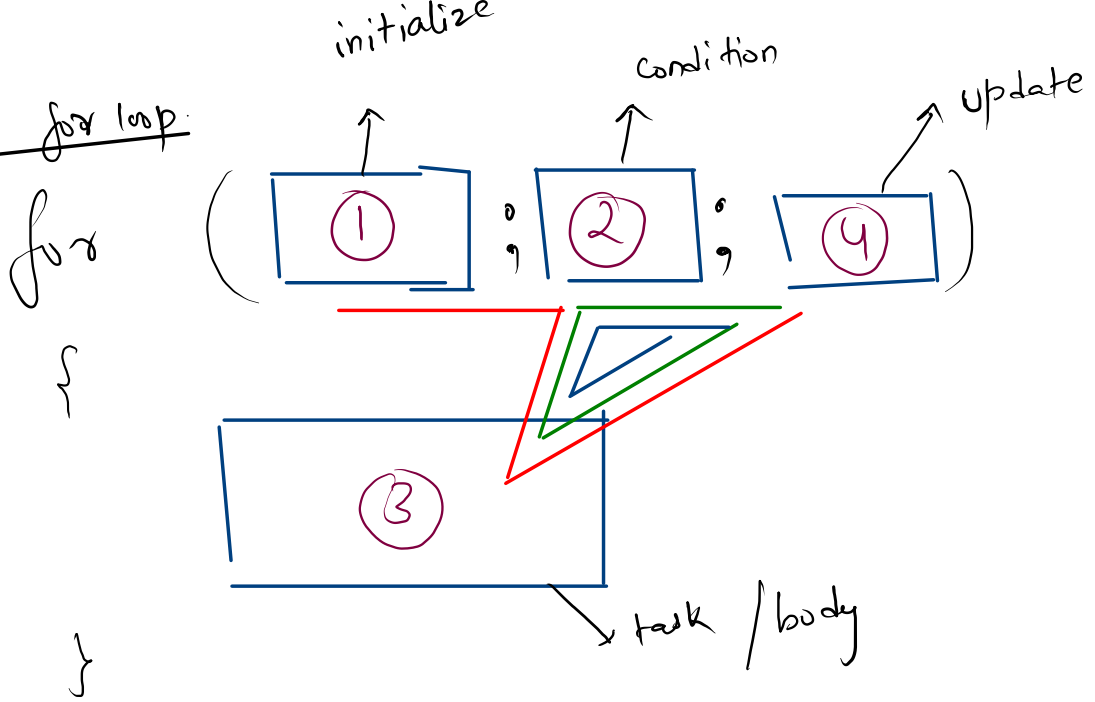
Loops. → Repeat tasks.

- for
- while

for:

```
for ( int i=1 ; i<=3 ; i++)
{
    System.out.println("Hi");

}
```

Structure of for loop



```
5       for(int i = 1; i <= 3; i++){
6           System.out.println(i);
7       }
8   }
9   }
```

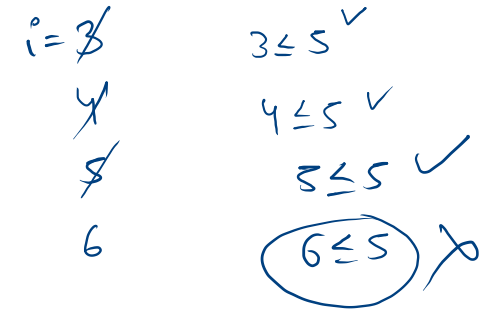
for (① ; ② ; ④)
{
③
}

i = 1 2 3 4

1 <= 3 ✓
2 <= 3 ✓
3 <= 3 ✓
4 <= 3

o/p
1
2
3

```
5       for(int i = 3; i <= 5; i++){
6           System.out.println("Sorry");
7       }
```



Print Range

n = 2

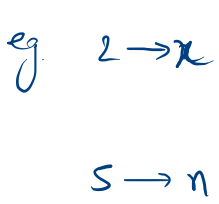
```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int n = scn.nextInt();
        for(int i = 1; i <= n; i++){
            System.out.println(i);
        }
    }
}
```

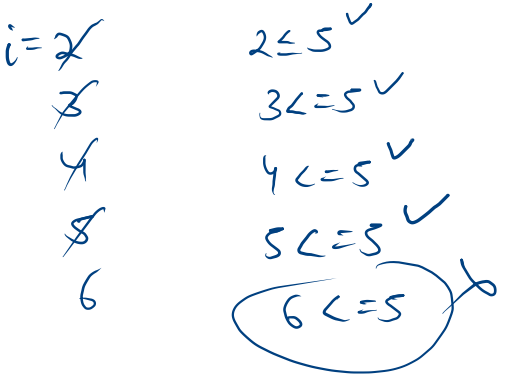
i = 1 : 1 ≤ 2
i = 2 : 2 ≤ 2
i = 3 : 3 ≤ 2 (false)

1
2

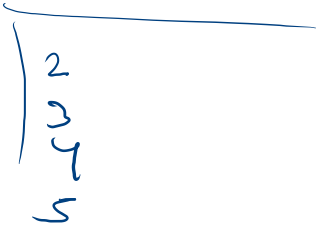
Print x to n

You will be given **x** and **n** as an integer input from the user. You have to print the number from **x** to **n**(both inclusive), each number in the different line.






```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int x = scn.nextInt();
        int n = scn.nextInt();

        for(int i = x; i <= n; i++){
            System.out.println(i);
        }
    }
}
```



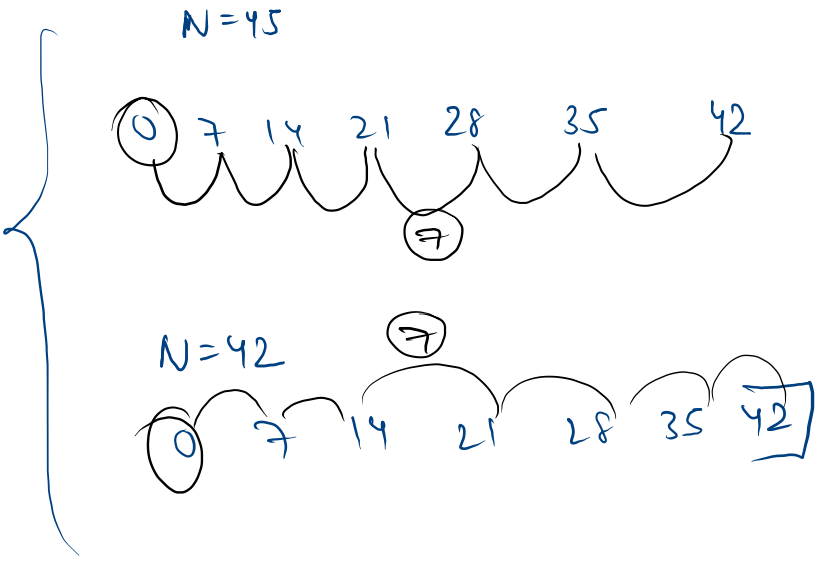
GKSTR11 Multiple Of 7

Problem | Submissions | Leaderboard | Discussions

Take an integer **N** as input, and print all the multiples of **7** till **N**(inclusive).

eg. → 45

eg → 42



n=45

Submitted Code

Language: Java 8

```
1  import java.io.*;
2  import java.util.*;
3
4  public class Solution {
5
6      public static void main(String[] args) {
7          Scanner scn = new Scanner(System.in);
8          int n = scn.nextInt();
9
10         for(int i = 0; i <= n; i = i + 7){
11             System.out.print(i + " ");
12         }
13     }
14 }
```