

```
for ( int ①i = 1 ; ②i <= 3 ; ④i++ )  
{  
    syso ( "Geekster" );  
    ③  
}
```

① → ②<sup>✓</sup> → ③ → ④ → ②<sup>✓</sup> → ③ → ④ → ②<sup>✓</sup> ...  
②<sup>x</sup>

i/p  $\hookrightarrow n=5$ o/p  $\hookrightarrow$   
1  
2  
3  
4  
5i/p  $\hookrightarrow \underline{3}$ 

loops.

o/p  
1  
2  
3

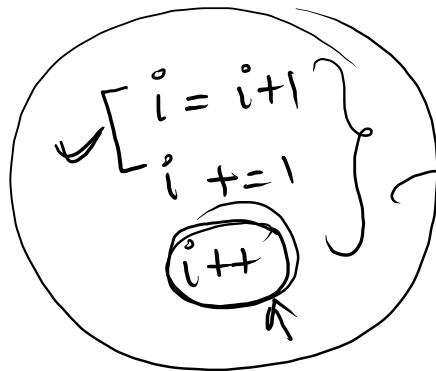
```

1. Scanner scn = new Scanner(System.in);
2. int n = scn.nextInt();
3. for(int i = 1; i <= n; i++){
4.     System.out.println(i);
5. }

```

 $n=3$  $i = 1, 2, 3, 4$  $i \leq n$  $1 \leq 3$  $2 \leq 3$  $3 \leq 3$  $4 \leq 3 \rightarrow \text{false}$ 

1
2
3



# Print 0 to n

$n = 5$

✓ 0  
1  
2  
3  
4  
✓ 5

$n = 3$

0  
1  
2  
3

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

public class Solution {

    public static void main(String[] args) {
        /* Enter your code here. Read input from
        Scanner scn = new Scanner(System.in);
        int n = scn.nextInt();

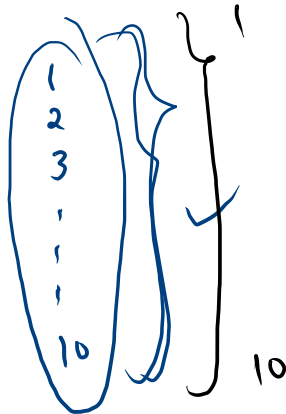
        for(int p = 0; p <= n; p++){
            System.out.println(p);
        }
    }
}
```

Print table of 4

4x1=4  
4x2=8  
4x3=12  
4x4=16  
4x5=20  
4x6=24  
4x7=28  
4x8=32  
4x9=36  
4x10=40

$$\begin{array}{l} 4 \times 1 = 4 \\ 4 \times 2 = 8 \end{array}$$

[1, 10]



for (int i=1; i<=10; i++)

i=2

{

→ Syso( "4x" + i + "=" + 4\*i);

}

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

public class Solution {

    public static void main(String[] args) {
        for(int i = 1; i <= 10; i++){
            System.out.println("4x" + i + "=" + 4*i);
        }
    }
}
```

Print x to n

i/p  $\begin{matrix} < x & \dots & 2 \\ < n & \dots & 9 \end{matrix}$

eg.

$x \dots 3$   
 $n \dots 7$

3  
4  
5  
6  
7

$\checkmark$   
 $\checkmark$   
 $[x, n]$

2  
3  
4  
5  
6  
7  
8  
9

3  
4  
5  
6  
7  
8  
9

for ( int i =  $x$  ;  $i \leq n$  ;  $i++$  )  
{  
    Syso(  $i$  );  
}

```
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);
        }
    }
}
```

$$n=8$$

0

2

4

6

8

even

$$n=7$$

0

2

4

6

$$i \% 2 == 0$$

```
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++){
11            //Check if this 'i' is even or not
12
13            if( i%2 == 0 ){
14                System.out.println(i);
15            }
16        }
17    }
18 }
```

eg.  $n = 21$

0 7 14 21

eg.  $n = 24$

0 7 14 21

for ( 0  $\longrightarrow$   $\leq n$ )  $i \rightarrow 7$

```
public class Solution {

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

        // for(int i = 0; i <= n; i = i+7){
        //     System.out.print(i + " ");
        // }

        for(int i = 0; i * 7 <= n; i++){
            System.out.print(i*7 + " ");
        }

    }
}
```

Print 2,9,16...

2 } 7  
9 } 7  
16 } 7  
23 } 7  
30 }

start = 2  $\leq n$   
( $i=2$  ;  $i \leq n$  ;  $i=i+7$ )  
{  
    Syso.( == );  
}

```
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 = 2; i <= n; i=i+7){
11            System.out.println(i);
12        }
13    }
14 }
```



Print n to 1

$$n = 8$$

8  
7  
6  
5  
4  
3  
2  
1

3  
2  
1

n=3

start = n (8) --- end at (1)

for (int i = n ; i >= 1 ; i--)

{  
    syso(i)

}

~~i=3~~ 0

2 ≥ 1

1 ≥ 1

(0 ≥ 1)