

Revision.

for. \rightarrow repeat ur task \rightarrow use loop! \rightarrow for.

GKSTR09 Print_Range

Problem

Submissions

Leaderboard

Given a number n , print all integers in **range 1 to n** .

You can assume that input is a positive integer

Sample Input 0

5

Sample Output 0

1
2
3
4
5

$n=4$
1
2
3
4

$n=4$
1
2
3
4

```
4 public class Solution {  
5  
6     public static void main(String[] args) {  
7         Scanner scn = new Scanner(System.in);  
8  
9         int n = scn.nextInt(); //4  
10  
11         for(int i = 1; i <= n; i++){  
12             System.out.println(i);  
13         }  
14     }  
15 }
```

$n=4$

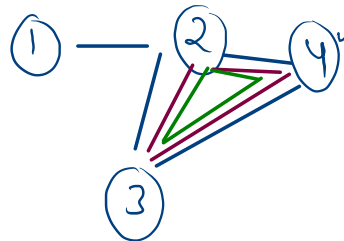
1
2
3
4

$i=1$ ✓
 $1 \leq 4$ ✓
 $2 \leq 4$ ✓

$i=2$ ✓
 $1 \leq 4$ ✓
 $2 \leq 4$ ✓

$3 \leq 4$ ✓
 $4 \leq 4$ ✓

$5 \leq 4$ ✗



Print x to n

Problem

Submissions

Leaderboard

Discussions

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.

if $\begin{cases} x \\ n \end{cases}$

eg. $x=3$ ✓
 $n=7$ ✓

$$\left\{ \begin{array}{c} 3 \\ 4 \\ 5 \\ 6 \\ 7 \end{array} \right.$$

eg. $x=2$
 $n=5$

$$\left\{ \begin{array}{c} 2 \\ 3 \\ 4 \\ 5 \end{array} \right.$$

Sample Input 0

3
10

Sample Output 0

3
4
5
6
7
8
9
10

starting
↘
 x

ending
↙
 n

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

{

$\text{sys}o(i);$

}

x
⋮
 n

eg. $x=2$
 $n=5$

$i=2$ ✓ $2 \leq 5$ ✓
 ~~$i=3$~~ ✓ $3 \leq 5$ ✓
 $i=4$ ✓ $4 \leq 5$ ✓
 $i=5$ ✓ $5 \leq 5$ ✓
 $i=6$ ✗ $6 \leq 5$ ✗

$$\left\{ \begin{array}{c} 2 \\ 3 \\ 4 \\ 5 \end{array} \right.$$

eg.

$x = 2$
 $n = 5$

```
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(); // 2
        int n = scn.nextInt(); // 5

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

$i = 2$
 3
 4
 5
 6

2
3
4
5

$2 \leq 5$ ✓
 $3 \leq 5$ ✓
 $4 \leq 5$ ✓
 $5 \leq 5$ ✓
 $6 \leq 5$ ✗

Print table of 4

Problem

Submissions

Leaderboard

Discussion

You have to print the table of 4 using the loop concept as given below:

$4 \times 1 = (4 \times i)$

$4 \times 2 = (4 \times i)$

$4 \times 3 = (4 \times i)$

$4 \times 4 =$

$4 \times 5 =$

$4 \times 6 =$

$4 \times 7 =$

$4 \times 8 =$

$4 \times 9 =$

$4 \times 10 =$

blue.
↳ fixed =

[1, 10]

RHS.

$i = 3$

4×3

$= 12$

(12)

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

i=1

4x

$4 \times 1 = 4$

$4 \times 2 = 8$

$4 \times 3 = 12$

$4 \times 4 = 16$

$4 \times 5 = 20$

$4 \times 6 = 24$

$4 \times 7 = 28$

$4 \times 8 = 32$

$4 \times 9 = 36$

$4 \times 10 = 40$

$i = 2$

```
6 public static void main(String[] args) {
7     for(int i = 1; i <= 10; i++){
8         // System.out.print("4x");
9         // System.out.print(i);
10        // System.out.print("=");
11        // System.out.print(4*i);
12        // System.out.println();
13
14        System.out.println("4x" + i + "=" + (4*i));
15    }
16 }
17 }
```

$$4 \times 1 = 4$$

$$4 \times 2 = 8$$

⋮

⋮

⋮

$$4 \times 10 = 40 \checkmark$$

GKSTR11 Multiple Of 7

Problem	Submissions	Leaderboard	Discussion
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Take an integer N as input, and print all the multiples of 7 till N (inclusive).

ip { N

eg. $n=42$

{ 0 7 14 21 28 35 42 }

eg. $n=40$

{ 0 7 14 21 28 35 }

starting.

$i=0$

ending.

$i \leq n$

0 7 14 21
+7 +7 +7

```

6 public static void main(String[] args) {
7     Scanner scn = new Scanner(System.in);
8     int N = scn.nextInt(); //42
9
10    for(int p = 0; p <= N; p = p + 7) {
11        System.out.print(p + " ");
12    }
13 }
14

```

o/p

0 7 14 21 28 35 42

$p=0$
 $0 \leq 42$

$p=7$ 14 21 28 35
 $7 \leq 42$

$0 \leq 42$
 $7 \leq 42$
 $14 \leq 42$

$21 \leq 42$
 $28 \leq 42$
 $35 \leq 42$

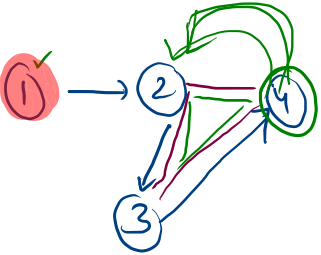
$42 \leq 42$
 $49 \leq 42$

```

Scanner scn = new Scanner(System.in);
int N = scn.nextInt(); // 20

for(int p = 0; p <= N; p = p + 7){
    System.out.print(p + " ");
}

```



✓ p=0
7
14
21

0 ≤ 20 ✓

7 ≤ 20 ✓

14 ≤ 20 ✓

21 ≤ 20 ✗

20

0 7 14 ✓

0...7...14...

```

6 public static void main(String[] args) {
7     Scanner scn = new Scanner(System.in);
8     int N = scn.nextInt();
9
10    for(int p = 0; p <= N; p = p + 7){
11        System.out.print(p + " ");
12    }
13 }
14 }

```

Print 2,9,16...

Problem

Submissions

Leaderboard

Discussions

You will be given an input n of integer data-type. You have to print numbers of the series 2, 9, 16, 23... till n in different lines, where the last number printed should be an integer just less than n or equal to n .

To be clear, you will print n if it belongs to the series.

Sample Input 0

40

Sample Output 0

2
9
16
23
30
37

i/p { n

2, 9, 16, 23... $\leq n$
+7 +7 +7 +7

start
0 +7 7 +7 14 ... $\leq n$

similarity

2 9 16 23 ...


```

6 public static void main(String[] args) {
7     Scanner scn = new Scanner(System.in);
8     int N = scn.nextInt(); // 30
9
10    for(int p = 2; p <= N; p = p + 7) {
11        System.out.println(p);
12    }
13 }
14 }

```

2
9
16
23
30

$P = 2, 9, 16, 23$

30
 37

$2 \leq 30 \checkmark$

$9 \leq 30 \checkmark$

$16 \leq 30 \checkmark$

$23 \leq 30 \checkmark$

$30 \leq 30 \checkmark$

$37 \leq 30$

Print n to 1

Problem

Submissions

Leaderboard

Discussions

Sample Input 0

8

Sample Output 0

8
7
6
5
4
3
2
1

You will be given an input n as an integer data-type. You have to print the series from n to 1 in n different lines.

ip { n

n=5 o/p { 5
4
3
2
1 ✓

n=3 { 3
2
1

starting.
for (i = ?
i = n ; i ≥ 1 ; i --)
{
 syso(i);
}

```

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

```

$i = 4, 3, 2, 1, 0$

4 ≥ 1 ✓

3 ≥ 1 ✓

2 ≥ 1 ✓

1 ≥ 1 ✓

0 ≥ 1 ✗

$n = 4$

4
3
2
1

4
3
2
1

```

4 public class Solution {
5     //i < 0
6     public static void main(String[] args) {
7         Scanner scn = new Scanner(System.in);
8         int n = scn.nextInt(); //4
9
10        for(int i = n; i > 0; i--) {
11            System.out.println(i);
12        }
13    }
14 }

```

$n=4$

$i=4$ $3 \neq 0$ $1 \neq 0$

$4 > 0$

$3 > 0$

$2 > 0$

$1 > 0$

$0 > 0$

$i \geq 1$
 $i > 0$

$n \dots 4321$

$n \dots 321$

4
3
2
1

6

```
for ( ① ; ② ; ④  
      }  
      ③  
      }
```

Print n to x

i/p { n
x

n = 7
x = 2

Problem

Submissions

Leaderboard

Discussions

You will be given an input n and x as an integer input, and you have to print the numbers from n to x in different lines.

starting pt.

i = n

inc/dec.

i--

ending pt.

i >= x

→ work.

7
6
5
4
3
2 ✓

```
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         int x = scn.nextInt();  
10  
11  
12         for(int i = n; i >= x; i--){  
13             System.out.println(i);  
14         }  
15     }  
16 }
```

Reverse 5 table

Sample Output 0

Problem

Submissions

Leaderboard

You have to print the table of 5 in reverse as given below.

no ip.

5x 10 = (5*i)
5x 9 =
5x 8 =
5x 7 =
5x 6 =
5x 5 =
5x 4 =
5x 3 =
5x 2 =
5x 1 =

5x10=50
5x9=45
5x8=40
5x7=35
5x6=30
5x5=25
5x4=20
5x3=15
5x2=10
5x1=5

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         for(int i = 10; i >= 1; i--){
8             System.out.println("5x" + i + "=" + 5*i);
9         }
10    }
11 }
```

print odd from n to 1

Problem

Submissions

Leaderboard

Discussions

$n \geq 12$

You will get an integer input n and you have to print all the odd numbers from n to 1 such that each number should be printed in a separate line.

0
1

$n \dots \geq 1$

if (odd)
 print

$i \% 2 \neq 0$
 print

$n=9$

9

7

5

3

1

11

9

7

5

3

1

number

even

odd

divisible
by 2

$$i \% 2 == 0$$

not divisible
by 2

$$i \% 2 \neq 0$$

\neq

any
loop

```
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 = n; i >= 1; i--){  
11        if(i % 2 != 0){  
12            System.out.println(i);  
13        }  
14    }  
15 }  
16 }
```

$n=12$

$i = 12, 11, 10, 9$

$i \geq 1$

$12 \geq 1$ ✓

$11 \geq 1$ ✓

$10 \geq 1$

$9 \geq 1$ ✓

$10 \% 2 \neq 0$

11
9

$9 \% 2 \neq 0$

$$\begin{array}{r} 2 \overline{) 9} 4 \\ 8 \\ \hline 1 \end{array}$$

$11 \% 2 \neq 0$

n := 12

11
9
7
5
3
1

if (even)

↘ (-1)

⇓

odd



✓
11 ✓
9
7
5
3
1

n = 11 9 7 5 3 1
-1
i ≥ 1

```
5  
6 public static void main(String[] args) {  
7     Scanner scn = new Scanner(System.in);  
8     int n = scn.nextInt();  
9  
10    if(n % 2 == 0){  
11        n--;  
12    }  
13  
14    for(int i = n; i >= 1; i = i - 2){  
15        System.out.println(i);  
16    }  
17 }  
18 }
```

Print n, n-3, n-6

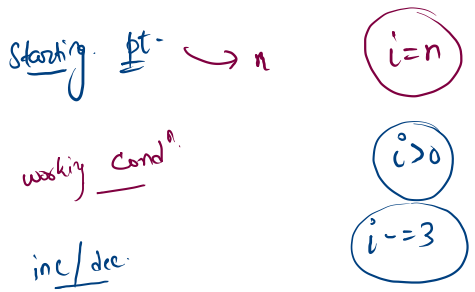
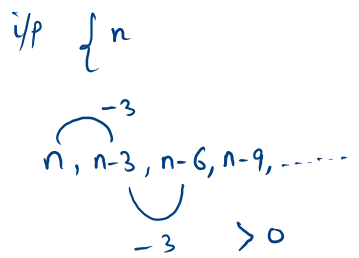
Problem	Submissions	Leaderboard	Discussion
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You will be given an input n of integer data type.

You have to print the series $n, n-3, n-6, \dots$

Important points:

- 1. You have to print each number in a different line
- 2. Also you have to print till the time the printed value is greater than 0



Sample Input 0

20

Sample Output 0

20
17
14
11
8
5
2

```
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 = n; i > 0; i -= 3){
11            System.out.println(i);
12        }
13    }
14 }
```