

## GKSTR02 Concatenate\_Two\_Strings

Problem Submissions Leaderboard Discussions

✓ Hello + Friends = HelloFriends

Take two strings as input by creating a Scanner object. Print the final string as output after concatenation.

str1 → input  
str2 → input  
System.out.println(str1 + str2);

Scanner scn = new Scanner(System.in);  
String str1 = scn.nextLine(); "Hello"  
String str2 = scn.nextLine(); "Friends"  
System.out.println(str1 + str2);  
HelloFriends

→ Generic ✓

## string concatenate 2

Problem Submissions Leaderboard Discussions

a → Hello → 5  
b → hi → 2

hiHellohi

Given 2 strings, a and b, return a string of the form short+long+short with the shorter string on the outside and the longer string on the inside. The strings will not be the same length, but they may be empty (length 0).

comboString("Hello", "hi") → "hiHellohi" comboString("hi", "Hello") → "hiHellohi" comboString("aaa", "b") → "baaab"

5 2  
b+a+b  
✓

a+b+a

=> baaab

a.length > b.length  
b+a+b

```
Scanner scn = new Scanner(System.in);
String a = scn.nextLine(); earth → 5
String b = scn.nextLine(); mars → 4
if(a.length() > b.length()){
    System.out.println(b+a+b); mars earth mars
} else{
    System.out.println(a+b+a);
}
```

\* Loops

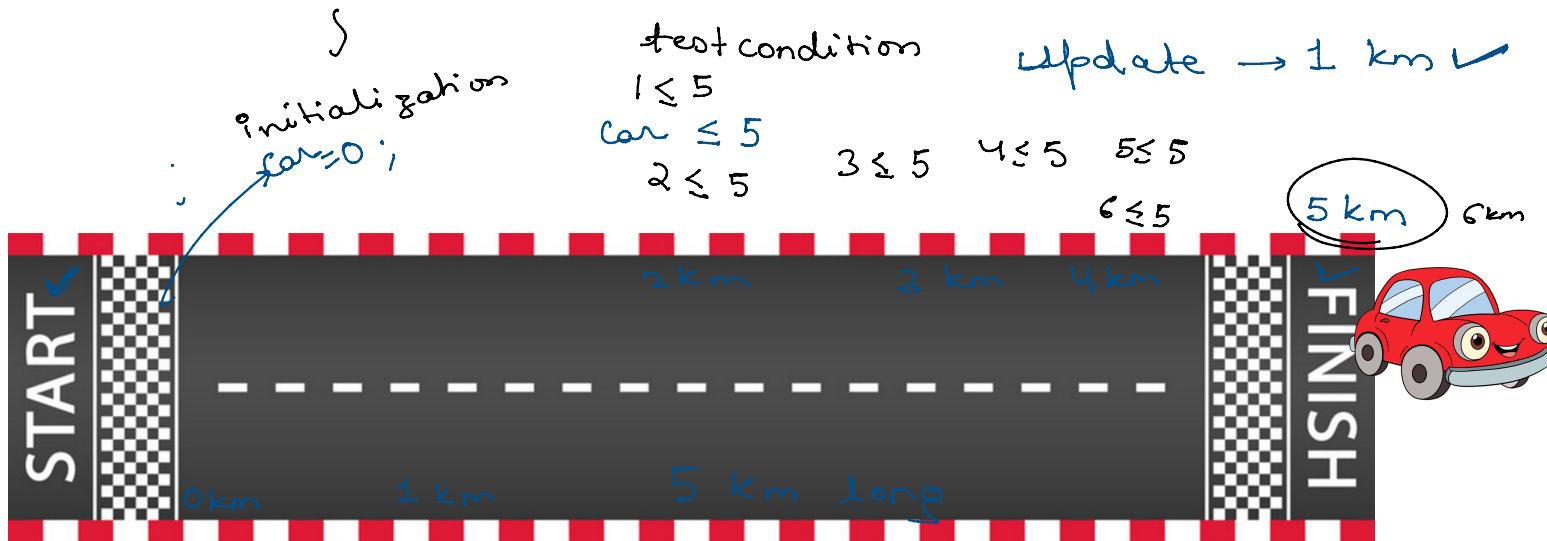
- - . . . - - - In absent

## \* Loops

↳ In programming, loops are used to repeat a block of code.

### # for-loops

Syntax : `for ( initialization; testCondition; update ) {  
 // body of the loop.  
}`



- Loop is easy  $\rightarrow$  3 times  $\rightarrow$  100 times

{  
 System.out.println("Loop is Easy")  
 ;  
 ;  
 ① 1 ② 0 < 10 ③ i = i + 1 ④  
 for(int i = 0; i < 10; i = i + 1){  
 System.out.println("Loop is Easy");  
 }

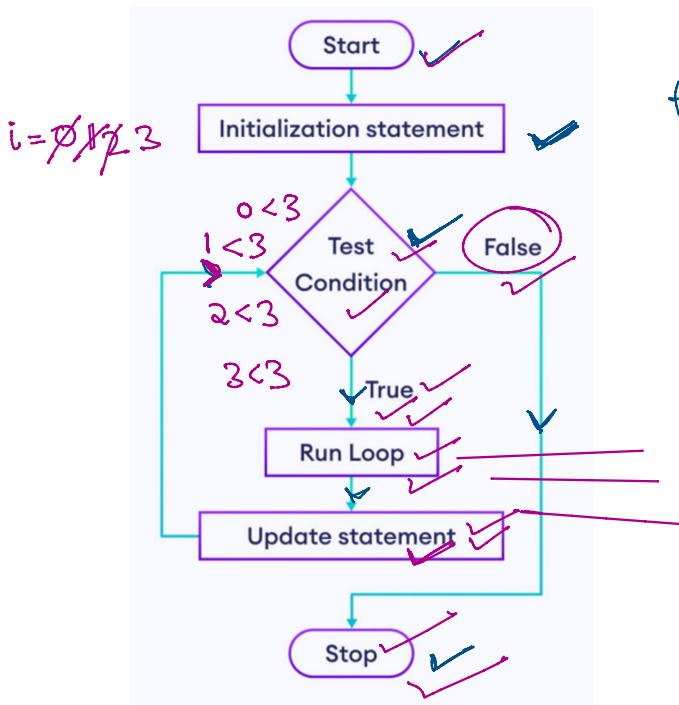
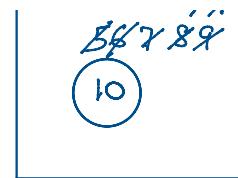
0 1 2 3 4 5 6 7 8 9  
10 → times  
0 1 2 3 4 5 6 7 8 9 10  
11 → times

Step 1 → Initialization Loop is Easy  
Step 2 → testCondition Loop is Easy  
Step 3 → printing Loop is Easy

i = 0 1 2 3 4  
5 6 7 8 9  
10

Step 2 → testCondition  
 Step 3 → printing  
 Step 4 → updation

Loop is Easy



```

for (int i = 0 ; i < 3 ; i++) {
  Print ("Hello World");
}
  
```

Hello World  
Hello World  
Hello World

→ output

```

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

- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓
- 5 ✓
- 6 ✓
- 7 ✓
- 8 ✓
- 9 ✓
- 10 ✓

# infinite for loop

$i \leq 5$

$i = i - 1$

$i \leq 5$

```

for (int i = 1 ; i <= 5; i = i - 1);
{
  print (Hi)
}
  
```

Hi  
Hi  
Hi  
Hi

- Summary of for loops

- A for loop is used to repeat block of code.
- The loop runs as long as test-condition is true.
- If the test condition of a loops never evaluates to false , the loops runs endlessly. This is known as an infinite loops.

$$\left. \begin{array}{l} n \% 2 == 0 \rightarrow \text{even} \\ n \% 2 != 0 \rightarrow \text{odd} \end{array} \right\}$$

- GKSTR09 Print\_Range

Problem Submissions Leaderboard Discussions

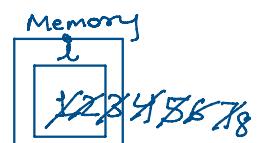
Given a number  $n$ , print all integers in range 1 to  $n$ .

You can assume that input is a positive integer

$i \leq n$

$i++ ;$

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



1  
2  
3  
4  
5  
6  
7

→ output

# Print 0 to n

Problem

Submissions

Leaderboard

Discussions

You will be given an input n of integer data-type.

You have to print numbers from 0 to n in n different lines.

for eg. n is 5, so the output should be something like, As given below 0 1 2 3 4 5

```
Scanner scn = new Scanner(System.in);
int n = scn.nextInt();
for(int i = 0 ; i<=n; i++){
    System.out.println(i);
}
```

# Print table of 4

Problem

Submissions

Leaderboard

Discussions

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

$$4 \times 1 = 4$$

$$4 \times 2 = 8$$

$$4 \times 3 = 12$$

$$4 \times 4 = 16$$

$$4 \times 5 = 20$$

$$4 \times 6 = 24$$

$$4 \times 7 = 28$$

$$4 \times 8 = 32$$

$$4 \times 9 = 36$$

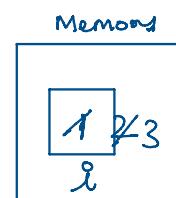
$$4 \times 10 = 40$$

$$\text{for } i = 1 \text{ to } 10 \text{ do } \text{print } 4 * i$$

```
for(int i = 1; i<=10; i++){
    System.out.println("4" + "x" + i + "=" + (4*i));
}
```

$$4 \times 1 = 4 \times 1$$

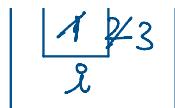
$$4 \times 2 = 4 \times 2$$



K

\*

$$4 \times 2 = 4 * 2 8$$



1 ~

## GKSTR11 Multiple Of 7

Problem Submissions Leaderboard Discussions

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

Sample Input 0

98 ✓

update

Sample Output 0

0 14 21 28 35 42 49 56 63 70 77 84 91 98 ✓

$n \rightarrow 98$

```
for (initialization; i <= n; i += 7) {
    i = i + 7;
    i = i + 7;
```

0 till n

$i \% 7 == 0$

$i = i + 7$

→ more time

( i + " "); )

```
Scanner scn = new Scanner(System.in);
int n = scn.nextInt();
for(int i = 0; i <= n; i+=7){
    System.out.print(i + " ");
}
```

## Print x to n

$x \rightarrow \text{input}$   
 $n \rightarrow \text{input}$

$x \rightarrow n$   
( int i=x ; i <= n ; i++ )

Problem Submissions Leaderboard Discussions

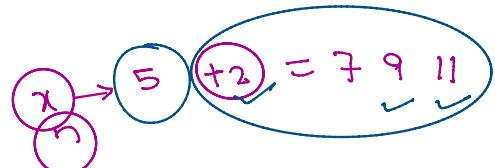
You will be given x and n as an integer input from the user. You have to print the number from x to n(both inclusive), each number in the different line.

```

Scanner scn = new Scanner(System.in);
int x = scn.nextInt(); 7
int n = scn.nextInt(); 18
for(int i = 7; i <= n; i++){
    System.out.println(i); 7
}
8
9
10
11
12
13
14
15
16
17
18

```

## GKSTR15 Print\_Even


[Problem](#)
[Submissions](#)
[Leaderboard](#)
[Discussion](#)

Given a integer  $n$ , print all even numbers from 0 till  $n$  (including, if even)

$i = 0 \quad i \leq n$

$\left\{ \begin{array}{l} \text{if } (i \% 2 == 0) \rightarrow \text{even} \\ \quad \quad \quad \text{print}(i); \end{array} \right.$

```

Scanner scn = new Scanner(System.in);
int n = scn.nextInt(); 10  $\rightarrow 11 \leq 10 \rightarrow \text{break}$ 
for(int i = 0; i <= n; i++){
    if(i%2 == 0){
        System.out.println(i);
    }
}

```

0  
2  
4  
6  
8  
10

0 2 4 6 8 10  
12 14 16 18  
20 22 24 26  
28 30 32 34  
36 38 40 42  
44 46 48 50  
52 54 56 58  
60 62 64 66  
68 70 72 74  
76 78 80 82  
84 86 88 90  
92 94 96 98  
100

Print 2,9,16...  $\rightarrow \leq n$

7  
7  
7  
2 9 16 23

Update

[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.

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.

```
/* Enter your code here. Read input from Scanner scn = new Scanner(System.in);  
int n = scn.nextInt();  
for(int i = 2 ; i<=n ; i=i+7){  
    System.out.println(i);  
}
```

2 9 16 23 ... n