

## # String

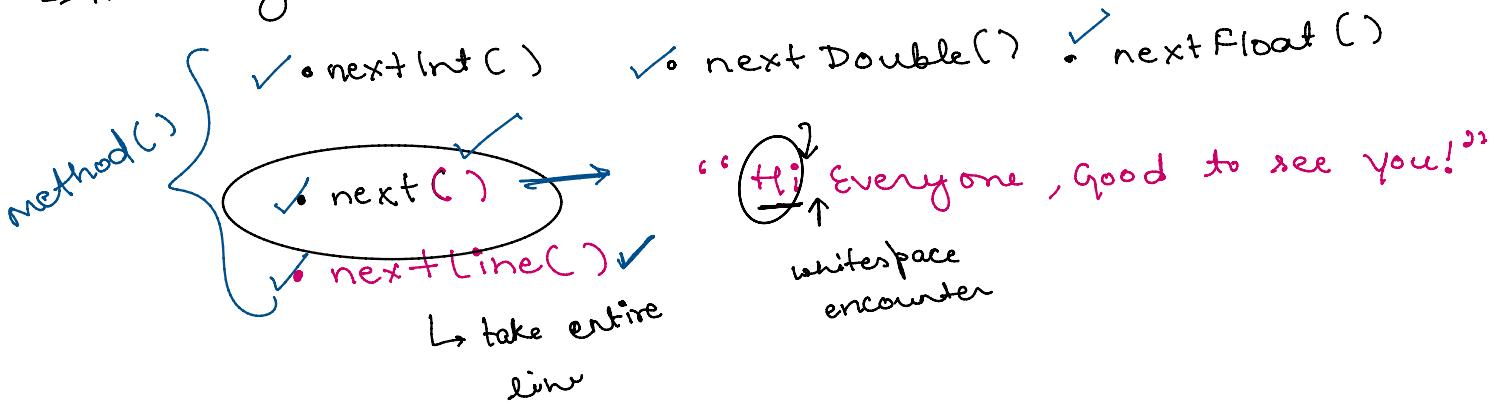
live doubt  
sub/post

↳ Collections of char

- "Krishna", "Hello World"

scr

※ Why won't we take input of String



Scanner scn = new Scanner(System.in);

String str = scn.next();

System.out.println(str);

→ It will just print the output till the 1st white space

Hi Everyone, Good to see you!

encounter.

Scanner scn = new Scanner(System.in);

String string = scn.nextLine();

System.out.println(string);

Complete line  
It will print the whole input that we have taken

※ Comparison Operator

= assigning value  
== comparing

## ~~#~~ Comparison $\sim\sim$

- less than ( $<$ )
- Greater than ( $>$ )
- less than or equal to ( $\leq$ )
- Greater than or equal to ( $\geq$ )
- Equal to ( $\equiv$ )
- Not equal to ( $\neq$ )

$=$  comparing value

// → single line comment

$/* \dots */$  - multi line comment

# Note → when you are writing a comparison operator inside print stat. it will produce true/false.

```
public static void main(String[] args) {  
    int a = 7;  
    System.out.println(a > 4); // true  
    System.out.println(a >= 7); // true  
    System.out.println(a >= 8); // false  
  
    System.out.println(a < 4); // false  
    System.out.println(a <= 4); // false  
    System.out.println(a <= 7); // true  
  
    System.out.println(a == 4); // false;  
    System.out.println(a != 4); // true  
  
}
```

single line  
cont

## Sum and Difference of x and y

\* Share your code to Host & Panlist

Multiple test case  
cases;

You will be given two integers  $x$  and  $y$ . You have to print the sum of  $x$  and  $y$  in the first line, and the difference of  $x$  and  $y$  in the second line.

First integer input should be stored in  $x$ , Second integer input should be stored in  $y$ .

Problem Submissions Leaderboard Discussions

First integer input should be stored in x, Second integer input should be stored in y.

```
Scanner scn = ;  
int x = scn.nextInt();  
int y = "";  
print(x+y); ✓  
print(x-y); ✓
```

~~int x = 40  
int y = 10~~

```
/* Enter your code here. Read input from  
Scanner scn = new Scanner(System.in);  
int x = scn.nextInt(); 40 } test cases  
int y = scn.nextInt(); 10  
System.out.println(x+y); 40+10 = 50 ✓  
System.out.println(x-y); 40-10 = 30 ✓
```

## Area and Perimeter 5

Problem

Submissions

Leaderboard

Discussions

Take length and breadth of the rectangle as input. And print area of the rectangle in the first line and perimeter of the rectangle in the second line.

length }  
Breadth } Input

Area }  
Perimeter } Output

Scanner class

```
int length = scn.nextInt();
```

```
int breadth = " " ;
```

```
{ int area = length * breadth;  
int perimeter = 2 * (length + breadth);  
print(area);  
.....
```

```

    } print (area);
    } print (perimeter);
}

```

```

Scanner scn = new Scanner(System.in);
int length = scn.nextInt(); 20
int breadth = scn.nextInt(); 30
int area = length * breadth; ✓ 20 * 30 = 600
int perimeter = 2 * (length + breadth); = 2 * (20+30)
System.out.println(area); ✓
System.out.println(perimeter); ✓ 2 * 60 = 100

```

Sample Input 1

20 ✓  
30 ✓

Sample Output 1

600  
100

Memory

length = 20
breadth = 30
area = 600
perimeter = 100 ✓

600 ✓  
100 ✓

## Fahrenheit and Celsius

Problem Submissions Leaderboard Discussions

$$\text{double } f \rightarrow c$$

$$\text{double } c = (f - 32) * 5/9$$

$$\text{print } (c)$$

You will be given Fahrenheit as input that should be stored in a double variable and print your answer in Celsius of data-type double.

Sample Input 0

32.0

Sample Output 0

0.0 ✓

```

/* ENTER YOUR CODE HERE. READ INPUT FROM
Scanner scn = new Scanner(System.in); ✓
double f = scn.nextDouble(); ✓ 32.0
double c = ((f-32)*5)/9; ✓ 0.0 Brackets > * / . % > + -
System.out.println(c); — left to right

```

# Add Last Digits

Problem

Submissions

Leaderboard

Discussions

You will be given two numbers of int data-type as input, and you have to print the sum of their last digits as output.

Test Case 1:

Given Inputs: 2357 48986

Expected Output: 13

$$\begin{array}{r} 2357 \\ 48986 \\ \hline 7 + 6 = 13 \end{array}$$

Explanation: The last digit of 2357 is 7 and the last digit of 48986 is 6, and the sum of these last digits is 13. Hence the output is 13.

$x \rightarrow \text{input}$   
 $y \rightarrow \text{2nd input}$   
print  $((x \% 10) + (y \% 10))$ ;

```
Scanner scn = new Scanner(System.in);
int x = scn.nextInt(); 4283 % 100
int y = scn.nextInt(); 2197 % 100
System.out.println((x%10) + (y %10));
            3    7    10 ✓
```

# Greater than 100 or not

Problem

Submissions

Leaderboard

Discussions

You will be given an integer as input you have to print true if the number is greater than 100, and false otherwise.

Test Case 1:

Input: 110

Output: true

Explanation: Since the given input is greater than 100, we printed true.

int x = input
true  
false
System.out.println ( $x > 100$ );

```
/* Enter your code here. Read input from System.in  
Scanner scn = new Scanner(System.in);  
int n = scn.nextInt();  
System.out.println(n>100);|
```

## Sum is less than 150 or not.

Problem

Submissions

Leaderboard

Discussions

You will be given three integer inputs x, y, z. You have to find the sum of these inputs. Print true if the sum is less than 150 and false otherwise.

```
int x → input  
y → input  
z → input  
int sum → x+y+z;  
print (sum<150);
```

```
Scanner scn = new Scanner(System.in);  
int x = scn.nextInt();  
int y = scn.nextInt();  
int z = scn.nextInt();  
int sum = x + y + z;  
System.out.println(sum < 150);
```

xyzw

$x_0 == y_0 \rightarrow \text{true}$

Problem

Submissions

Leaderboard

Discussions

You will be given four integer inputs x, y, z, w. Print true if  $x*y$  is equal to  $z*w$  and false otherwise.

$\checkmark \checkmark \checkmark \checkmark$   $y_0^{10}$   $z_0^{20}$   $w_0^{2}$

You will be given four integer inputs x, y, z, w. Print true if  $x * y$  is equal to  $z * w$  and false otherwise.

```
int a = x*y  
int b = z*w  
print(a==b);
```

```
Scanner scn = new Scanner(System.in);
```

```
int x = scn.nextInt(); 10  
int y = scn.nextInt(); 15 }  
int z = scn.nextInt(); 5 }  
int w = scn.nextInt(); 7 }
```

```
System.out.println((x * y) == (z * w)); → false
```

## ~~Logical Operators~~

- And Operator
- OR Operator
- Not Operator

## # Logical And Operator (`&&`)

- Syntax `Cond1 && Cond2`

Cond1	Cond2	Result
T	T	T
T	F	F
F	T	F
F	F	F

```
a = 10, b = 20, c = 20  
condition1: a < b 10 < 20 → true  
condition2: b == c 20 == 20 → true  
if(condition1 && condition2)  
d = a+b+c → d = 10+20+20  
= 50  
// Since both the conditions are true
```

(F)	F	F
-----	---	---

// Since both the conditions are true  
d = 50. ✓

```
public static void main(String[] args) {
```

```
int age = 24;
```

```
int salary = 950;
```

```
boolean result; true
```

```
result = (age >= 18 && salary > 600);
```

```
System.out.println(result); → true
```

```
result = (age >= 18 && salary > 1000); false
```

```
System.out.println(result); → false
```

1. True
2. false

## Logical OR operator (||)

Shift + backslash button  
↑ above Enter btrs

- Syntax → cond1 || cond2

Cond1	Cond2	Result
T	T	T
T	F	T
F	T	T
F	F	F

```
a = 10, b = 20, c = 20

condition1: a < b → 10 < 20 → true
condition2: b > c → 20 > 20 → false
if(true || false)
d = a+b+c ✓

// Since one of the condition is true
d = 50. ✓
```

```

int age = 24;
int salary = 950;

boolean result;
result = (age >= 18 || salary > 1000);
System.out.println(result);

```

result = (age >= 30 || salary > 1000);  
 System.out.println(result);

## # Short circuiting.

- OR logical → 1<sup>st</sup> cond<sup>n</sup> is true, do I need to check 2<sup>nd</sup> cond<sup>n</sup>

1<sup>st</sup> → true  
 2<sup>nd</sup> → t/f  
 ↓  
 don't worry  
 result → true

- And logic → 1<sup>st</sup> cond<sup>n</sup> is false } 1<sup>st</sup> → f  
 do I need to check } 2<sup>nd</sup> → t/f  
 2<sup>nd</sup> cond  
 result → false

1<sup>st</sup> → f  
 2<sup>nd</sup> → t/f  
 ↓  
 don't worry  
 result → false

## # Logical Not Operator (!)

↳ Syntax → !(cond<sup>n</sup>)

Cond	Result
T	F
F	T

```
int age = 24;
```

boolean result;  
result = !(age >= 24);

! true → false

System.out.println(result); → false

result = !(age == 25);

! false → true

System.out.println(result); → true