

⇒ Variables

↳ Imagine a variable as bucket/container which is used to store data.

⇒ Data Types (Primitive) :-

- ⇒ ↳ int :- 1, 10, 15, -15, 0...
- ⇒ ↳ char :- 'a', 'Z', '1', '+', ...
- ⇒ ↳ boolean :- true, false
- ⇒ ↳ float :- 2.3, 5.4, -2.4, ...
- ⇒ ↳ double :- 3.20547, ...
- ⇒ ↳ short :- numbers
- ⇒ ↳ long :- numbers
- ⇒ ↳ byte :- numbers

Ex:-

declare a variable (Syntax)

≡ { data_type variable_name = value ;

assignment operator

int a = 5 ;

char b = 'k' ;

boolean c = false ;

double d = 7.434242 ;

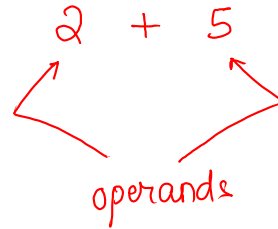
keyword

⇒ Operators

1) Airthematic operators

$+$, $-$, $*$, $/$, $\%$

ex:-



5/5

2*5

5 - 2

⋮

2) Assignment operator

int a = 5 ;

3) Relational operator

ex:- $>$, $<$, $>=$, $<=$, $==$, $!=$

$5 > 2 \rightarrow \text{true}$

$5 >= 5 \rightarrow \text{true}$

$7 == 2 \rightarrow \text{false}$

$7 != 7 \rightarrow \text{false}$

$2 < 1 \rightarrow \text{false}$

Note:-

$=$:- assignment

$==$:- relational

4) Unary Operators

$+$, $-$, $++$, $--$

`int a = 5;`

\Rightarrow $a++$ value will be 6

\Rightarrow $a--$ value will be 5

\Rightarrow $++a$ value will be \uparrow ed

\Rightarrow $--a$ value will be \downarrow ed

[postfix inc./dec.]

[prefix inc/dec.]

↳ Ternary operators

↳ Logical operators

,
,
,
,

Sum and Difference of x and y

```
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 y = scn.nextInt();

        int sum = x + y;
        int diff = x - y;

        System.out.println(sum);
        System.out.println(diff);
    }
}
```

→ scanner
class
(used to
take input
from user)

Area and Perimeter 5

```
int length = 10;
```

```
int breadth = 20;
```

```
int area = length * breadth;
```

```
int perimeter = 2 * (length + breadth);
```

```
public class Solution {
```

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

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

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

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

```
        int area = length * breadth;
```

```
        int perimeter = 2 * (length + breadth);
```

```
        System.out.println(area);
```

```
        System.out.println(perimeter);
```

```
    }
```

```
}
```

Fahrenheit and Celsius

double f = 32.0;

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

= (32.0 - 32) * $\frac{5}{9}$ = 0.0

code

```
public class Solution {  
  
    public static void main(String[] args) {  
        Scanner scn = new Scanner(System.in);  
        double f = scn.nextDouble();  
  
        double c = (f - 32) * 5 / 9;  
  
        System.out.println(c);  
    }  
}
```


Add Last Digits

int a = 1234 ;

int b = 22 ;

ans = 4 + 2 = 6

Note

a = 1234

digit1 = a % 10 = 4

code

```
public class Solution {  
  
    public static void main(String[] args) {  
        Scanner scn = new Scanner(System.in);  
        int a = scn.nextInt();  
        int b = scn.nextInt();  
  
        int digit1 = a % 10;  
        int digit2 = b % 10;  
  
        int ans = digit1 + digit2;  
        → System.out.println(ans);  
    }  
}
```

123
10 $\overline{) 1234}$
- 1230
——
4 ←