

Imp Notes :-

↳ code execution always starts from main function

↳ flow of execution is always top to bottom and left to right

⇒ Comments

↳ it is statement which doesn't get executed

Types :-

1) // :- single-line comment

2) /* */ :- multi-line comment

↳ comment example

```
public static void main(String[] args) {  
    // System.out.println("*****");  
    System.out.println("*");  
    System.out.println("*");  
    /*  
    System.out.println("*");  
    System.out.println("*****");  
    */  
}
```

⇒ Variables

↳ a variable is a container used to store data

⇒ Constant :- which is having fixed value

⇒ Data Type

⇒ ↪ int :- 2, 3, 10, -15, 0

⇒ ↪ float :- 2.3, 3.4, 5.72, -1.5, 5.0

⇒ ↪ char :- 'a', 'B', '+', '5', '%', ' '

⇒ ↪ double :- 2.357420573,

⇒ ↪ long :- 10573423789

⇒ ↪ boolean :- true, false

↪ byte :- numbers

↪ short :- numbers

Syntax :- declaring a variable

```
data_type    variable_name = value ;
```

- 1) `int a = 5 ;`
- 2) `char b = 'Z' ;`
- 3) `boolean c = false ;`
- 4) `float d = 7.3 ;`
- 5) `double e = 7.315278905 ;`

\Rightarrow Operators :- which are used to evaluate a mathematic expression

1) Arithmetic operators :- $+$, $-$, $*$, $/$, $\%$

$\hookrightarrow 2 + 3$
 $\hookrightarrow 7 / 2$
 $\hookrightarrow 3 * 5$

2) Assignment operator :- $=$

\hookrightarrow `int a = 7;`

Note:- it always work from right to left

3) Relational operators :-

1)	>	:-	5 > 2	(true)
2)	<	:-	5 < 2	(false)
3)	>=	:-	5 >= 5	(true)
4)	<=	:-	7 <= 8	(true)
5)	==	:-	7 == 5	(false)
6)	!=	:-	7 != 5	(true)

4) Unary Operator :- `int a = 5;`

<code>a++</code>	:- post increment	} +1
<code>++a</code>	:- pre increment	

<code>a--</code>	:- post decrement	} -1
<code>--a</code>	:- pre decrement	

Sum and Difference of x and y

i/p int x = 5
 int y = 3

o/p x + y (8)
 x - y (2)

code

```
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);  
}
```

Area and Perimeter 5

i/p :- `int length = 5 ;`
 `int breadth = 10 ;`

`area = length * breadth ;`

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

code

```
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

if double f = 75.2;

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

code

```
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

ex `int a = 57 ;`
`int b = 28 ;`
`int ans = 7 + 8 = 15`

(224)
a = 224

int b = a % 10 ;

code

```
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);  
}
```