Imp Note :-

↳ flow of code

1) top to bottom
2) left to right

Note :- line

1) statement 1
2) statement 3 statement 4
3) statement 2

ans → 1 3 4 2

Note:-

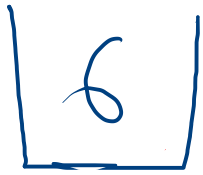
Comments

- // statement (single line comment)
- /* statement 1
  statement 2 */ (multiple line comment)

Comments

```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {

        // System.out.println("***");

        /* System.out.println("***");

        System.out.println("***"); */

        System.out.println("***");

    }
}
```

⇒ Variables



↳ variables can be considered as a bucket which stores some data

⇒ Constant (5)

↳ which is having a fix value

→ Data Type (Premitive)

- int :- 5, 7, 1000, 0, -10, -1, ...
- char :- 'a', 'B', 'Z', '1', '-5', '0', '+', '/', ' '
- float :- 5.2, -2.3, 2.0, 7.15
- boolean :- true or false (Java specific)
  0 or 1 C++
- double :- 5.23741507 34, -0.00000000001
- byte :- no. from -128 to 127
- short :- no. from -32,768 to 32,767
- long :- huge range to store no.'s only

Syntax

```
data_type  var_name = value ;
```

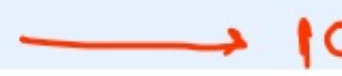
```
int a = 5 ;
```



```
boolean b = true ;
double c = 5.235 ;
double d = 5 ;        // 5.0
char e = 'P' ;
```

Sum and Difference of x and y

```
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int x = scn.nextInt();
    int y = scn.nextInt();

    System.out.println( x + y );
    System.out.println( x - y );
}
```



Area and Perimeter 5 (l , b)

(rectangle)

i/p

```
int length = 5 ;
int breadth = 6 ;
```

```
area = length * breadth ;
```
(30)

```
perimeter = 2 * ( length + breadth ) ;
```
(22)

Note:- always take input in the same order, as it is given in question

Code

```java
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int length = scn.nextInt();
    int breadth = scn.nextInt();

    int area = length * breadth;
    System.out.println(area);

    int perimeter = 2 * (length + breadth);
    System.out.println(perimeter);
}
```

Fahrenheit and Celsius

$$\text{double } f = 37.5;$$

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

code

```java
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);
    }
}
```

⇒ Operators :- which are used to evaluate a math:s expression

1) Airthematic + , − , / , * , %

↳ 3+4
↳ 8/4
↳ 5-3
↳ 7%3

2) Assignment =

a = 5

(always work right to left)

3) Relational operator :-

> , < , >= , <= , == , !=

5 > 2 → true

7 < 3 → false

4) Unary Operator :-

```
int a = 5;
```

a++ :- post increment

a-- :- post decrement

++a :- pre increment

--a :- pre decrement

H.W

how does % operator works