UNARY OPERATOR

- Basically, Unary operator that operates on a single operand or the expression.
- For a funny way unary operator can act as alone person doing work.
- There are different types of unary operators:

  They are: 1. Unary plus (+)
  2. Unary minus (-)
  3. Increment (++)
  4. Decrement (--)
  5. Logical Complement (!)
  6. Bitwise Complement (~)

- **Unary plus (+):**
  - ✓ It is used to represent the positive value.
  - ✓ It does not change the value of any variable.
  - ✓ Simply we can say as the positive identity of the person (e.g., parents).
- **Unary Minus (-):**
  - ✓ It is used to represent the negative value.
  - ✓ It does not change the value of any variable.
  - ✓ Simply we can say as the negative identity or character of the person.
    e.g., enemies, etc…
- **Logical complement (!):**
  - ✓ It is used to invert the values of boolean operands.
  - ✓ In a funny way we can say that if you Yes to buy something then your sibling will say No to buy something.
- **Bitwise complement (~):**
  - ✓ It is used to flip or invert each bit of the operand.
  - ✓ Let us consider an example:

    a=5 0101

    1's complement 1010

    Then ~a=-(a+1) = -6.

Let see how it is possible: ~a= -6

Just Remove the sign of the value in calculation

6	0110
1's complement	1001
2's complement	1010

Therefore, we can conclude as

2's complement (Result) == 1's complement (Number).

/*Write a java program for unary operators? */

```
class Unary{
    public static void main(String []args){
        int a=53;
        boolean b=true;
        byte c=+10;
        short d=-5;
        System.out.println(~a+" "+!b+" "+c+" "+d);
    }
}
```

In which data type the number 92233703685477820 be stored?

The value stored in the long datatype of java.

By the ending of the number, we need end with "L".

So that the system should accept a large number.

What is the range of real number datatypes?

Real number datatype is of two types:

They are: 1. float

2. double

float: It can hold exactly 7 decimal points

upper range: 3.4028235E38

lower range: 1.4E-45

double: It can hold exactly 15 decimal points

upper range: 1.7976931348623157E308

lower range: 4.9E-324