

Data types of Expressions & increment by Munawar

Resulting data type after arithmetic operation

Following table summarizes the resulting data types after arithmetic operation on them.

$R = b + s \text{ -----} > \text{Int}$

$R = s + i \text{ -----} > \text{Int}$

$R = l + f \text{ -----} > \text{float}$

$R = i + f \text{ -----} > \text{float}$

$R = c + i \text{ -----} > \text{Int}$

$R = c + s \text{ -----} > \text{Int}$

$R = l + d \text{ -----} > \text{double}$

$R = f + d \text{ -----} > \text{double}$

$b \text{ ---} > \text{byte}$

$f \text{ ----} > \text{float}$

$s \text{ ---} > \text{short}$

$d \text{ -----} > \text{double}$

$l \text{ ---} > \text{integer}$

$c \text{ -----} > \text{character}$

$L \text{ ----} > \text{long}$

Increment and decrement operators

$a++ , ++a \text{ -----} > \text{increment operators}$

$a-- , --a \text{ -----} > \text{decrement operators}$

There will operate on all data types except Booleans

Quick quiz what will be the value of the following expression (x)

Int y=7;

Int x=++y+8;

Value of x

Source Code

```
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        byte x=4;
        int y=6;
        short z=8;
        int a=x+y;
        float b=6.54f+x;
        System.out.println(b);

        int i=55;
        System.out.println(i++);
        int j=50;
        System.out.println(j--);
        System.out.println(j);
//quiz Q1
        int m=7;
        int k=++m*8;
        System.out.println("The value of m is");
        System.out.println(k);

        //quiz Q2
        char ch='M';
        System.out.println(++ch);
    }
}
```

Thank You