

Day 3

* Operators :-

- 1) Arithmetic Operator (mathematical operation)
- 2) Relational Operator (Comparison)
- 3) Logical Operator
- 4) Bitwise Operator
- 5) Assignment operator
- 6) Ternary

1) Arithmetic Operator :-

Ternary Operator - 3 operands - $?$: conditional operator
 Binary Operator - 2 operands - $+$, $-$, $*$, $\%$, $/$
 Unary operator - 1 operand - $++$, $--$, $!$, \sim

$+$ (addition), $-$ (subtraction), $/$ (division), $*$ (multiplication)
 $\%$ (modulo).

Increment ($++$), Decrement ($--$)

$a++$ - postfix

$a--$ postfix

$++a$ - prefix

$--a$ prefix

2) Relational Operator :-

$==$ (equal to)

$>$ (greater than)

$<$ (less than)

$>=$ (greater than equal to)

$<=$ (less than equal to)

$!=$ (Not equal to)

3) Logical Operator :-

&& (And) - Both value true then true otherwise false

|| (Or) - One true then true

! (Not) - Convert true to false

4) Size of -

int a = 5

sizeof(a) : 4, 0

size of data type.

5) Bitwise Operator -

& - And

| - Or

^ - bitwise XOR

<< - left shift

>> - right shift

~ - one's complement.

6) Ternary Operator :-

Condition ? print something : print something

Q Find last digit of number

```
#include <iostream>
```

```
using namespace std;
```

```
int main() {
```

```
    int n;
```

```
    cin >> n
```

```
    last = n%10
```

```
    cout << last;
```

```
    return 0;
```

```
}
```

* Operator precedence and associativity

Operator	Type	Associativity
() [] . ->		left to right
++ -- ! * / % + -	Unary operator	Right to left
<< >>	Arithmetic operator	Left to Right
< <= > >= == !=	Shift operator	Left to right
& & ! && ?:	Relational operator	left to right
& & ! && ?:	Bitwise AND	left to right
& & ! && ?:	Bitwise XOR	left to right
& & ! && ?:	Bitwise OR	left to right
& & ! && ?:	Logical AND	left to right
& & ! && ?:	Logical OR	left to right
& & ! && ?:	ternary conditional operator	left to right