

L2

Introduction to [lang]

Join Discord - <https://tinyurl.com/ly-discord>

A:: Abhishek Writing our first program

① B:: Abhishek

```
#include <bits/stdc++.h>
```

② using namespace std; ✓

```
int main()  
{  
    cout << "Hello World";  
    return 0;  
}
```

③

1. line by line

pow(2,5);
32

#include <math>

GetCar, car & LearnYard

Function

1. takes some data
2. Do some functionality
3. Returns result.

eg add 2 nums

Parameters

return type

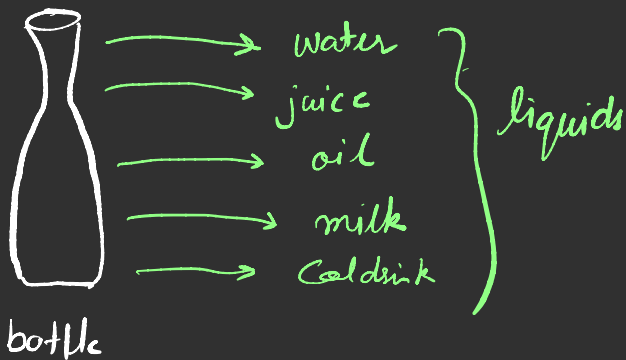
int

add (int a, int b)

```
{  
    int c = a + b;  
    return c;  
}
```

~~void nothing ()~~
~~{~~
 ~~return;~~
~~}~~

Variables



Data types

int a;

↓
data type

name

-5

6

10

0

11

4 bytes

8 bits = 1 byte

1 int = 4 bytes = 32 bits

2^1 1 bit = 2 num

2^2 2 bit = 4 num

2^3 3 bit = 8 num

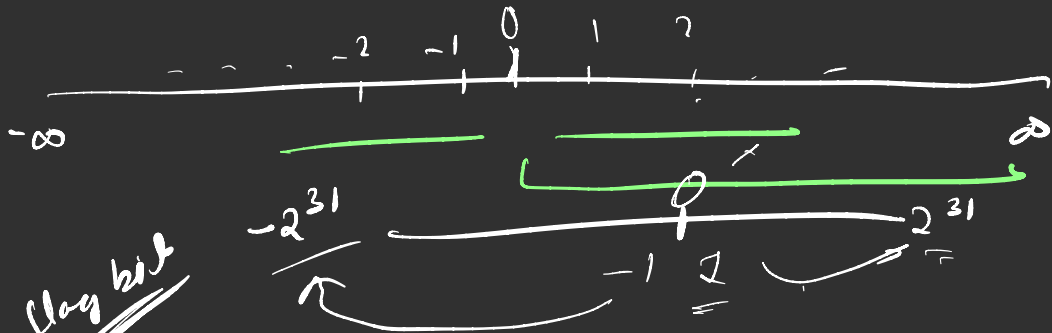
2^{32}

0	0	→ 0
0	1	→ 1
1	0	→ 2
1	1	→ 3

(0,1) → 0
 → 1

4, 2, 0, 1

0	0	0	→ 0
0	0	1	→ 1
0	1	0	→ 2
0	1	1	→ 3
1	0	0	→ 4
1	0	1	→ 5
1	1	0	→ 6
1	1	1	→ 7



flag bit

1 -ve
0 +ve

1 -ve 2^{31}
0 -ve 2^{31}

0 $2^{31}-1$

-2^{31} to $2^{31}-1$

char c;

Operators

Arithmetic Operator & Assignment Operator

$+$ $-$ $*$ $/$ $\%$

$=$

$\int c = a + b$

$\int a * b$

$a - b;$

$\int a = 5$

$\int b = 2$

$\int c = a / b$

Operators

Relational and Logical Operator

||
 &&
 !
 ~

	T		T	T
=	T		F	T
	F		T	T
	F		F	F

(2 2)	2
2 && 0	0
0 && 1	0
0 0	0

$F! = T$
 $T! = F$

Taking Input

In Java - we use Scanner class

In C++ - we use cin

Homework Question

1. Enter two numbers and perform all arithmetic operations
2. Enter P, R, T and calculate simple interest.

Next Class Plan

1. Conditional Statements
2. Loops
3. Some Practice

Thank You!

Reminder: Going to the gym & observing the trainer work out can help you know the right technique, but you'll muscle up only if you lift some weights yourself.

So, PRACTICE, PRACTICE, PRACTICE!