

# Programming in C++

07.09.21

## Data types

Average =  $(a+b)/2 \rightarrow$  Constant<sup>2</sup>.  
 $\quad \quad \quad \quad \quad \quad \quad \rightarrow$  variable.

## Primitive

Derived

## User-defined

→ Integer

→ Float

→ character

→ Boolean

→ Function

→ Artery

→ painters

→ Reference.

→ class

→ Structure.

→ Union

→ Enum

INT

4 bytes.

Range  $\rightarrow$  (unsigned)  
 $= 0 \text{ to } 2^{32} - 1$

$$\text{Range (Signed)} = (-2^{31}) \text{ to } (2^{31} - 1)$$

Float

4 bytes (7 decimal)

Double

8 bytes (15 decimal)

Char

1 byte (ASCII Table)

Bool

1 byte (true/false)

long → 8 bytes

Short → 2 bytes.

Pre processor directive.

Header file.

#include <iostream>

int main() {

std::cout << "Hello world\n";  
return 0;

execution  
of code  
begins  
from main  
function.

Exit Status  
of a function.

Add line  
break

**Task** :-

① Basic Add/Sub/etc.  
(calculator type)

**If - Else Statement**

if (condition) {  
    execution 1;  
}  
else {  
    execution 2;  
}



→ if , else if , else . . . Statement.

→ nested if-else

```
if (condition) {  
    if (condition) {  
        execution;  
    }  
    else {  
    }  
}
```

- ① find Maximum from 3 given no.
- ② odd-even check