1 Basic structure of C++ program

```cpp
#include <iostream>  -> input output    [Header file]
int main ()£  — function
std::cout << "Hello"; — output  Hello
return 0; — Successfull termination.
}
```

2 Variables

↓
Container to store data: ex- like storing water in a tank.

Low level	High level
hardware se nejdeek	hardware se dur

Some datatypes:-
- int — 1, 0, 1
- float — 1.1, 2.1
- char — 1 character

like
a = 1
b = 2
c = a+b

3 Comments

```cpp
using namespace std;
int main ()£
// This is comment  — ignored by compiler   [single line comment]
int a = 3;
float b = 3.5;
char c = '(';
```

[multi line comment]
```cpp
/*  This is
multi line comment. */  —also —ignored
```

4. Variable types

1. Int — 1, 0, 89
2. float — 2.7, 3.8
3. Char — 'c', 'd' etc.
4. Double — 1.2189...
5. boolean — yes, no, true, false

5. Variable scope — region in which variable exist.

important

local variable
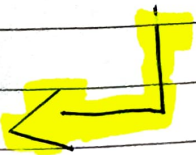↳ declared inside function
   can be accessed there.

Global variable
↳ declared outside function
   accessed everywhere.

6. Datatypes

- Built-in — { int, float, char, double, boolean }
- user-defined
  { struct, union, Enum } — covered further
- derived { Array, function, pointer }

7. Input, Output

8. Keyword

bool	for
float	const
int	return
do	double
while	or

etc.... .!

```cpp
#include <iostream>
using namespace std;
int a;  ──> Global scope
int main(){

    int num1, num2;  ─── local scope

    cout << " Enter first number : \n" ""
```
insertion operation
```cpp
    cin >> num1;
```
takes
input from
user
extraction operator
```cpp
    return 0;
}
```