Introduction to C++

CLASS- 2

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C++ installation

There are many compilers available for C++. You need to download any one.

for general use, go for **Turbo C++**.

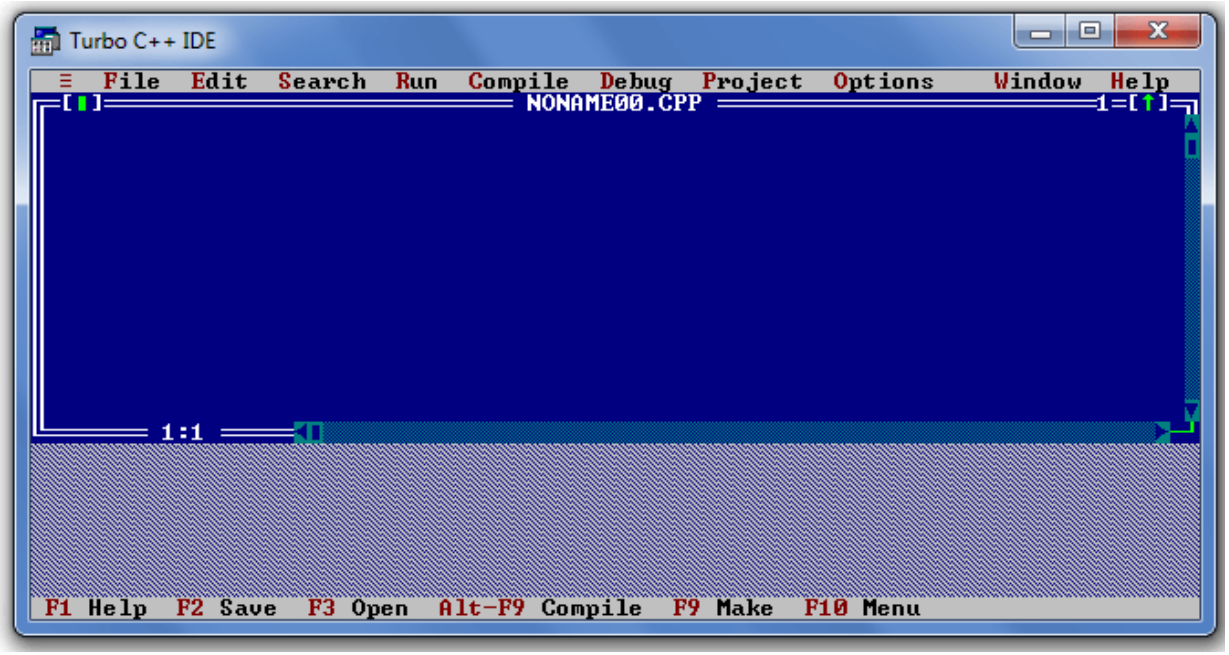
It will work for both C and C++.

To install the Turbo C++ software, you need to follow following steps:

- Download Turbo C++
- Double click on the install.exe file and follow steps.

C++ installation

- Click on the tc application file located inside c:\TC\BIN to write the c program.
- After previous step, it looks like:



C++ simple program

Before starting C++ language, you need to learn how to write, compile and run the first C++ program.

Ex-

```
#include <iostream.h>
#include<conio.h>
void main()
{
  cout << "Welcome to C++ Programming.";
  getch();
}
```

C++ simple program

Description of program:

- **#include<iostream.h>** includes the **standard input output** library functions. It provides **cin** and **cout** methods for reading from input and writing to output respectively.
- **#include <conio.h>** includes the **console input output** library functions. The getch() function is defined in conio.h file.
- **void main()** The **main() function is the entry point of every program** in C++ language. The void keyword specifies that it returns no value.
- **cout << "Welcome to C++ Programming."** is **used to print the data "Welcome to C++ Programming."** on the console.
- **getch()** The getch() function **asks for a single character**. Until you press any key, it blocks the screen.

C++ simple program

How to compile and run the C++ program:

There are 2 ways to compile and run the C++ program, by menu and by shortcut.

- **By menu**

Now **click on the compile menu then compile sub menu** to compile the c++ program.

Then **click on the run menu then run sub menu** to run the c++ program.

- **By shortcut**

Press ctrl+f9 keys compile and run the program directly.

C++ Basic Input/Output

C++ I/O operation is using the stream concept. Stream is the sequence of bytes or flow of data. It makes the performance fast.

- If bytes flow from main memory to device like printer, display screen, or a network connection, etc, this is called as **output operation.**
- If bytes flow from device like printer, display screen, or a network connection, etc to main memory, this is called as **input operation.**

C++ Basic Input/Output

Standard output stream (cout)

The **cout** is a predefined object of **ostream** class. It is connected with the standard output device, which is usually a display screen. The cout is used in conjunction with stream insertion operator (<<) to display the output on a console.

Standard input stream (cin)

The **cin** is a predefined object of **istream** class. It is connected with the standard input device, which is usually a keyboard. The cin is used in conjunction with stream extraction operator (>>) to read the input from a console.

C++ Basic Input/Output

Standard end line (endl)

The **endl** is a predefined object of **ostream** class. It is used to insert a new line characters and flushes the stream.

Example

```
#include <iostream>
void main( ) {
int a,b;
cout << "Enter two numbers: “<<endl;
cin >> a>>b;
Int c=a+b;
cout << “sum is: " << c << endl;
}
```

- Programming terminology