



Session #001

C Family → C, C++, Java, C#, JavaScript

C/C++ → Games, Graphics, Crypto currency, Embedded

Java → Windows Apps, Web Apps, Mobile App, Embedded, Gaming

C# → Windows App, Web App, Mobile App, Gaming

JavaScript → React.js, Angular.js, Vue.js, Next.js, Node.js

What is C?

C is a general purpose, high level programming language with Procedural Programming methodology

- Operating System
- Lotus 123 – Electronic Spread
- Word Star – Word Processing
- Database – SQLite, Foxbase, Foxpro
- Gaming
- Embedded

Developed by **Dennis Ritchie** in 1972

What is C++?

C++ is a also a general purpose, high level programming language with Object Oriented Programming

C with OOPs

Developed by Bjarne Stroustrup in 1995

[https://en.wikipedia.org/wiki/C_\(programming_language\)](https://en.wikipedia.org/wiki/C_(programming_language))

<https://en.wikipedia.org/wiki/C%2B%2B>

Tools required for C/C++ Development

- Dev C++ (<https://www.bloodshed.net>)
- Turbo C++ (<https://developerinsider.co/download-turbo-c-for-windows-7-8-8-1-and-windows-10-32-64-bit-full-screen>)

Basic points about C Programming

- C is case sensitive language
- C provides a big set of pre-defined functions to perform general operations
 - printf()
 - Print formatted data on the monitor in b/w
 - cprintf()
 - Print formatted data on the monitor in color
 - fprintf()
 - Print formatted data to some file or printer
 - clrscr()
 - Clear the screen
- C requires special function as entry point named as **main()** function
- To write a set of statements we need define a block using pair of braces {}

```
main(){  
  
}
```

- Each statement is terminated by **semicolon (;)**
- C programs must have **.c** extension

Test Case 1: tc001.c

WAP to print a message **Hello to C Programming** on the monitor in B/W

```
main(){  
  
    printf("Hello to C Programming");
```

```
}
```

How to compile the code into binary language?

Execute → Compile

How to run a program?

Execute → Run

Compile + Run

Execute → Compile and Run

tc001.c

```
1 ☐ main(){  
2   |   printf("Hello to C Programming");  
3   |   }  
   |
```