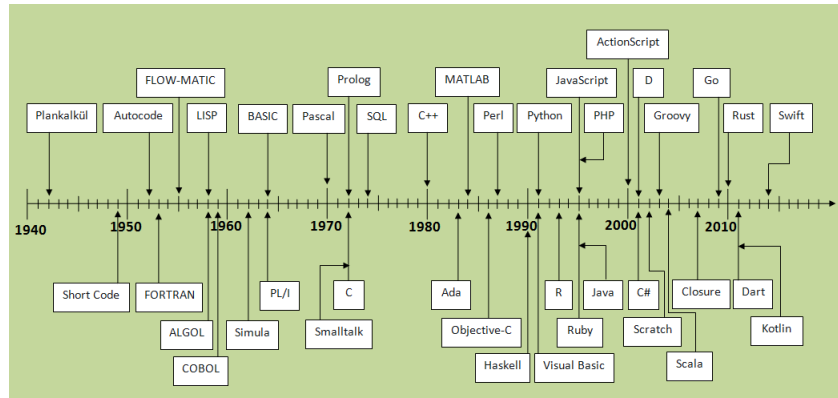


GSET - Programming with Mr. Hill - Summer 2021

Introduction to C++ - Tutorial 1 - Hello C++



Overview:

Traditionally, the first program we write when learning a new language is called *Hello World*.

System Requirements:

- **Computer:** A computer is required to complete this tutorial. Any OS should work.
- **Internet:** Your computer must be connected to the internet to proceed. It is a good idea to update the system before you begin.

Disclaimer:

- **Programming Experience:** Everyone is different and has a different level of computer experience. This is expected. Do not worry if you feel behind or ahead of your peers.

Part 1 - Programming Environment:

Choose your programming environment before you get started. You have several options.

Recommended Option:

- Online C++ Compiler - [OnlineGDB](#)

Advanced Options:

- GCC - [MinGW](#)
- Mac - (Xcode)
- MS - [Visual Studio](#)

Part 2 - The Code:

1. This is the C style way to output text.

```
1  /*****
2  GSET - Summer 2021
3  Programming with Mr. Hill
4  Hello World - C - June 2, 2021
5  *****/
6
7  #include <stdio.h>
8
9  int main()
10 {
11     printf("Hello World");
12
13     return 0;
14 }
```

2. This is the C++ style way to output text.

```
1  /*****
2  GSET - Summer 2021
3  Programming with Mr. Hill
4  Hello World - C++ - June 2, 2021
5  *****/
6
7  #include <iostream>
8
9  using namespace std;
10
11 int main()
12 {
13     cout<<"Hello World";
14
15     return 0;
16 }
```

3. Look at each line of the program carefully.

- Lines 1-7: Block Comment
- Lines 9: Pre-Processor Directive
- Line 11: A namespace declaration
- Lines 13-18: The main function
 - Line 15: Print to the standard output
 - Line 17: Complete the main function, return and integer

Part 3 - Testing:

1. Now, compile and run the C, and C++ code separately. What are the differences?
2. Choose a third language and repeat the exercise. Explain why you made this choice, also describe the purpose each line of the source code in the third version of hello world.
3. Save your code with the download button or use copy and paste. You can view and edit the code in any text editor. Also, save a copy of the program output for your tutorial summary.

Tutorial Complete:

Congratulations, after completing *Tutorial 1 - Hello World*, you have begun learning to program in C++! You are now ready to start Variables, Expressions, and Assignment.

Tutorial Summary:

Write a brief summary of what you accomplished and what you struggled with the most.

Include the following items in the summary:

- a copy of the output of your program
- a description of what the program does and how to use it

Submission on Teams:

Use the appropriate shared folder on Teams to submit your program and summary. Submit the following items with your TNTech username in the filenames as shown below.

Files for Tutorial 1 (TNTech Username : twhill21)

- Tutorial Summary: **twhill21_summary0.txt**
- C++ Source Code: **twhill21_tutorial0.cpp**