Hello World

Implement the following in a new project, within a file titled **HelloWorld.cpp,** and then build and execute your program

```cpp
#include <iostream>
using namespace std;

// main() is where program execution begins.
int main() {
    cout << "Hello World"; // prints Hello World
    return 0;
}
```

Looking at the different parts of the program, we have the following:
- The C++ language defines several headers, which contain information that is either necessary or useful to your program. For this program, the header **<iostream>** is needed.
- The line using **namespace std**; tells the compiler to use the std namespace. Namespaces are a relatively recent addition to C++.
- The next line '// **main() is where program execution begins**.' is a single-line comment available in C++. Single-line comments begin with // and stop at the end of the line.
- The line **int main()** is the main function where program execution begins.
- The next line **cout << "Hello World"**; causes the message "Hello World" to be displayed on the screen.
- The next line **return 0**; terminates main( )function and causes it to return the value 0 to the calling process.
- The **cout** object, together with the insertion operator (<<), is used to output values/print text
- You can add as many **cout** objects as you want. However, note that it does not insert a new line at the end of the output

C++ New Lines

To insert a new line, you can use the **\n** character Implement the following in a new project, within a file titled **NewLines.cpp**, and then build and execute your program

```cpp
#include <iostream>
using namespace std;

int main() {
  cout << "Hello World! \n";
  cout << "I am learning C++";
  return 0;
}
```

Two \n characters after each other will create a blank line.

Modify your **NewLines.cpp** file as follows, and run your program.

```cpp
#include <iostream>
using namespace std;

int main() {
  cout << "Hello World! \n\n";
  cout << "I am learning C++";
  return 0;
}
```

Another way to insert a new line, is with the **endl** manipulator.

Modify your **NewLines.cpp** file as follows, and run your program.

```cpp
#include <iostream>
using namespace std;

int main() {
  cout << "Hello World!" << endl;
  cout << "I am learning C++";
  return 0;
}
```

References

- https://www.tutorialspoint.com/cplusplus/cpp_basic_syntax.htm
- https://www.w3schools.com/cpp/cpp_user_input.asp