* basic structure of a C++ program, including #include, main (), and cout:

1. Include: - This line **includes** the content of another file before the actual compilation starts.
2. main () Function: - This **is the starting point of every C++ program**.
3. cout (Character Output): -It is used to **display output** on the screen

* cout & cin: -

cout: - Used to **display** text or values on the screen.

cout << "Hello, World!";

Cin: -Used to **take input** from the user through the keyboard.

int age;

cin >> age;

* the difference between POP and OOP approaches

| **Feature** | **POP (Procedural Oriented Programming)** | **OOP (Object Oriented Programming)** |
| --- | --- | --- |
| **Approach** | Follows a **step-by-step** procedure | Organizes code using **objects and classes** |
| **Focus** | Focuses on **functions** | Focuses on **objects** |
| **Data Access** | Data is **shared globally** | Data is **encapsulated** inside objects |
| **Security** | **Low**, since data is open to all functions | **High**, due to data hiding and encapsulation |
| **Reusability** | Hard to reuse code | Code is **highly reusable** through inheritance |
| **Real-world Modeling** | Difficult to model real-world entities | Easy to model real-world concepts using classes |
| **Example Language** | C | C++, Java, Python (OOP features) |
| **Example Code** | Uses main() and functions | Uses class, object, methods |

* setup: -

For Dev C++:

* + 1. Download from: <https://sourceforge.net/projects/orwelldevcpp/>
    2. Run the installer and complete the installation.
    3. launch Dev C++ and select **File > New > Source File**

Write a Simple C++ Program: -

#include<iostream>

Using namespace std;

{

}

Compile and Run:

Click **Execute > Compile & Run** or press F11.