

## **Programming Languages Overview:**

A programming language is a set of instructions and syntax used to create software programs. Examples of popular programming languages include Python, C++, Typescript and Java.

➤ **Python**

Its emphasis on code readability, shorter codes, ease of writing  
Programmers can express logical concepts in fewer lines of code in comparison to languages such as C++ or Java.

➤ **C++**

C++ is used in making operating systems, embedded systems, and Graphical User Interfaces. It is an object-oriented programming language that implements all the OOPs concepts such as Abstraction, Encapsulation, and Inheritance etc.

➤ **Java**

Java is a class-based, object-oriented programming language that is designed to have as few implementation dependencies as possible. It is intended to let application developers write once, and run anywhere (WORA).

## **Exploring Node.js:**

NodeJS executes JavaScript code outside of a web browser. It is used to build back-end services like APIs like Web App, Mobile App or Web Server. Node.js is beginner-friendly, ideal for prototyping and easy to get started.

## **Why Use Visual Studio Code?**

Visual Studio is an Integrated Development Environment (IDE) to develop Desktop applications, GUI (Graphical User Interface), console, web applications, mobile applications, cloud, and web services, etc.

Help developers quickly identify potential errors in the code, Visual Studio offers a robust debugging tool.