

# Programming Languages

And their features

# What is Programming Language?

A programming language is the computer language written to develop software programs, script or the set of instructions for the computers to execute.

# Types of programming languages

There are many types of programming language available in the market. All of these different types of programming languages have their own functionalities and specialties. They are used depending on the type of problem to be solved.

Some of the programming and their features are:

- 1) FORTRAN
- 2) COBOL
- 3) ALGOL
- 4) PL/I
- 5) BASIC
- 6) C
- 7) PYTHON

# FORTRAN

FORTRAN stands FORmula TRANslatin. This language is used for solving Scientific and mathematical problems. It consist of algebraic formulae and English phrases. It was first introduced in the United States in 1954.

Some the important features of FORTRAN are :

- 1) It is used for Formula Translation , numeric and scientific computing.
- 2) It is general propose programming language.
- 3) It supports Numerical analysis and scientific computation, Structured programming, Array programming, Object oriented programming, etc.
- 4) It is a general-purpose, imperative programming language.

# COBOL

COBOL stands for Common Business-Oriented Language. This language is used for commercial purposes. COBOL, which is written using English statements, deals with problems that do not involve a lot of mathematical calculations. It was first introduced in 1959.

Some of the features of COBOL are :

- 1) It is Business-Oriented Language used for business applications.
- 2) COBOL is an easy-to-learn, standard language that can be compiled and executed on a variety of computers. It supports a wide syntax vocabulary and features an uncluttered coding style.
- 3) COBOL has effective error messages and so, resolution of bugs is easier.
- 4) COBOL can handle huge data processing.

# ALGOL

ALGOL stands for ALGOrithmic Language. Originally called IAL which means International Algebraic Language. It is used for mathematical and scientific purposes. Algol was first introduced in Europe in 1960.

Some of the features of ALGOL are :

- 1) It is used for scientific computation.
- 2) It was used as the standard method for creating algorithms.

# PL/I

PL/I stands for programming language I. Developed in 1964 to combine features of COBOL AND ALGOL. Consequently ,it is used for data processing as well as scientific applications.

Some of the features of PL/I are :

- 1) It uses two types of data transmission: stream and record.
- 2) PL/I input and output statements (such as READ, WRITE, GET, PUT) let you transmit data between the main storage and auxiliary storage of a computer.

# BASIC

BASIC stands for Beginner's All-purpose symbolic Instruction code. It was Developed in 1965 by Dartmouth College in United States for use by students who require a simple language to begin programming

Some of the features of BASIC are :

- 1) It is used to simplify communication between the programmer and the computer.
- 2) It provides powerful features like GUI(graphical users interface).
- 3) It allows creation of loops.



# C

C is highly portable general purpose language which was developed in the 1970s to support UNIX operating system.

Some of the features of C are :

- 1) It is a structured programming language that is machine-independent .
- 2) C programming language is rich in library.
- 3) It provides the features of pointers.
- 4) It also allows creation of loops.

# Python

Python is an interpreted, object-oriented, high-level programming language. It was created by Guido van Rossum, and released in 1991.

Some of the features of Python are :

- 1) it is very versatile language. It can be used in various field like web development, AI(artificial intelligence) , software development, mathematics, data analysis and many more.
- 2) This language is also very rich in library and modules.
- 3) Python is an open-source programming language which means that anyone can create and contribute to its development
- 4) It support oops (object ordinated programming) which means it supports the features like class, object , encapsulation and inheritance etc.

Thank you