

## **PROGRAMMING LANGUAGE**

Language is a system of communication by written or spoken word which is used by the people of a particular country or area.

Computer language is a system of instructions and commands for operating a computer. It is a language that the computer understands and executes.

A program is a series of instructions which enable the computer to carry out some laid down procedures to accomplish a given task or solve a problem.

Programming is the act of giving the computer a set of instructions or codes to carry out, or perform a specific task. Programming can also be said to be the process of taking the step in a procedure and putting such in special languages (coding), which is the computer can understand.

**A computer programming language** is a large number of steps required to carry out a procedure, for example, to compute student examination scores.

### **Types of Computer Programming Languages**

There are two types of computer languages:

#### **1. Low-Level Language:**

Unlike human beings, the computer understands codes of digital binary numbers. These binary digits are made up of zeros (0) and ones (1), for example, 1100011, 10000111, 101001101. These digits are called low level language and it is the language the computer understands since the CPU operates by responding to electrical signals.

There are two types of low-level languages. They are:

- Machine language and
- Assembly languages

#### **2. High-Level computer programming Language:**

High level languages are human understandable languages. They allow programmers to write programs that are not dependent on the design of the CPU. High level languages are human languages and are used to solve problems.

The advantage of high-level languages over low level languages is that they are easier to read, easier to write and easier to use. However, programs written in high level languages must be translated into a language the computer understands. i.e. machine language by a translator. Examples of high-level languages are:

1. Fortran
2. COBOL
3. Logo
4. Pascal
5. Algo
6. Dbase
7. C
8. C+

9. C++
10. Basic
11. Java