# LANGUAGE

A medium which used to communicate.

# TYPES OF LANGUAGE

 i.  Natural Language
 ii.  Formal Language

# NATURAL LANGUAGE

 i.  Language which is spoken very casually.
 ii.  They are not designed by people.
 iii.  They evolved naturally.
 iv.  Ex – English, Spanish, French etc.

# FORMAL LANGUAGE

 i.  Languages which are used very formally.
 ii.  They are designed by people for specific applications.
 iii.  These languages tend to have strict syntax rules.
 iv.  Ex – Programming languages (C, C++, Python, Java, etc.)

# PROGRAMMING LANGUAGE

They are formal languages that have been designed to express computation.

# PROBLEM SOLVING

The ability to –

 i.  Formulate problems.
 ii.  Think creatively about solutions.
 iii.  Express the solution clearly and accurately.

# PROGRAM

It is a sequence of instructions that specifies how to perform a computation.

# COMPILER

 i.  It is translator which transforms source language into object language.
 ii.  It converts the whole program in one go.

# INTERPRETER

 i.  It is a program written in a source language.
 ii.  It converts the program by taking a single line at a time.

# PYTHON INTERPRETER

It is a program that reads and executes PYTHON CODE.

# WAY OF WRITING CODE

Python support two ways of writing 'Python Code' –

       i.      Interactive Mode
      ii.     Script Mode

**INTERACTIVE MODE –**

User interact with interpreter directly.

**SCRIPT MODE –**

User save the code in a file (or script) and then interpreter execute the whole script.