Python:- created by Guido van Rossum

It’s a general purpose interpreted, interactive, object oriented and high level programming language. It has few keywords, simple structure and a clearly defined syntax which allows the student to pick up the language quickly

* High level programming language
* General purpose
* Interpreted
* Interactive
* Object oriented
* Frequently uses English keywords instead of punctuation
* Fewer syntactical constructions
* Beginner language

Features:-

* Easy to learn:- (few keywords, simple structure, clear defined syntax)
* Easy to read
* Easy to maintain
* A broad standard library
* Interactive mode
* Portable
* Extendable
* Databases
* GUI Programming
* Scalable
* Can be used as scripting language or can be compiled to byte code
* Provides high level dynamic data types and supports dynamic type checking
* Automatic garbage collection
* Easily integrated with C, C++, COM, CORBA, ActiveX, Java.

Python Identifiers:-

* To identify a variable
* Starts with A to Z or a to z or (\_) followed by digits and alphabets
* Does not allow punctuation characters (@, $, %)
* Case sensitive
* Class start with an uppercase letter and other start with lowercase letter.
* Starting with \_ means its private
* Starting with \_\_ indicates strongly private
* Starts and ends with \_\_ indicates identifier is language defined special name

Lines & Identation:-

* Does not provide braces for block indication
* Line indentation, rigidly enforced
* Allows the use of line continuation character (\) for continuation
* Statements within [], {}, () do not need to use (\)

Quotation:-

* Accepts (‘), (“ “), (‘’’ ‘’’ or “”” “””) quotes
* Word = ‘word’
* Sentence = “sentence”
* Paragraph = “”” This is paragraph”””

Multi Line Assignment:- semicolon (;) allows multiple statements on the single line. It allows multiple assignment.

Header lines begins with keyword & terminate with colon ( : )

Standard data types:

1) Numbers

2) String

3) List

4) Tuple

5) Dictionary

It supports 4 numerical types:-

* Int
* Long (long, octal, hexadecimal)
* Float
* complex