

1Q) What are the data types used in python?

A). Numbers:-

Numbers datatypes store numeric values. Number objects are created when you assign a value to them.

• String:-

These are the sequence of characters enclosed in single or double quotes.

• Lists:-

A Lists contains an item which are separated by coma's, and enclosed within square brackets [ ].

• Types:-

A tuple contains a lists of items which are separated by commas, but are enclosed in paranthesis.

• Dictionary:-

They consist of key value pairs, a dictionary key can be of any type but are generally numbers or string. These are enclosed in curly braces,

2Q) Briefly explain history of python?

1. 1980's was the year where working on python started, soon after Van Rossum began working on its application by 1989 at CWI which is in

Neather land.

- The python programming language was succeeded with ABC programming language, which has an interfacing with Amaba OS and had the feature of exception handling.
- The name python was taken actually from . TV Show Monty python's flying circus as he was a very big fan of that TV show, and he also needed a small mysterious name here he selected python.
- This language was finally released in the year 1991.
- Its main objective is to provide code reliability and developer productivity.

③ Explain all the operators in python?

④  
\* Arithmetic operators :-

The operators are generally used to perform mathematical operations

Ex:- Addition, Sub, Multiplication, division, Modulus etc

$x + y$

$x - y$

$x * y$

$x / y$

$x \% y$



## \* Assignment operators:-

Generally used to assign a value to a particular variable.

Ex:-  $x = 5$

## \* Comparison operator:-

These are used to compare to values.

Ex:- Equal, Not Equal, Greater than, less than etc  
 $x = y$     $x \neq y$     $x > y$     $x < y$

## \* Logical Operation:-

Generally used to combine Condition Statement.

Ex:- AND, OR, NOT

## \* Bitwise operators:-

These operators are used to compare binary numbers.

Ex:- AND( $\wedge$ ), OR( $\vee$ ), XOR( $\oplus$ ), NOT( $\neg$ ), etc

4Q) Explain the features of python?

(A) Following are the features

i) Easy to learn & use:-

python is very easy to use

ii) Expression language:-

It is more understandable and readable.

(iii) Cross platform language:-

It is a portable language it can be used in diff & multiple platforms.

(iv) Object oriented language :-

python supports object oriented language, Concepts of classes and objects come into extendable by adding multiple features.

(vi) Integrated :-

It can be easily integrated by C, C++ & Java.

(5Q) Justify python is an interactive interpreted language.

(A) Python is interactive - You can actually sit at a python prompt and interact with interpreter directly to write your programs. Python is object oriented that encapsulates programs with object.