1. What are data types in python? Explain.

A. In programming data type is an important concept. Variables can store data of different types. Python has these built in data types.

Python numbers:

Integers, floating point numbers and 'compo numbers fall under Python numbers. They are defined as int, float and complex classes in python.

```
a = 5    # int value
a = 9.0  # float value
a = 1+2j # complex value
```

Boolean type:

It is of true (or) false.

```
x = True  # boolean true.
```

Strings:

```
x = "Hello world"  # string of characters
```

2. Explain history of Python.

A. Python is widely used general-purpose, high-level programming language. It was designed by Guido van Possum in 1991. Its main idea was emphasis on code readability and its syntax allows programmers to express concepts in fewer lines of code. Python 3.83 is the latest version currently there. When it was released, it used a lot fewer codes to express the concepts, when compare it with Java, c++ and c. Its main objectives to provide code readability and advanced developer productivity. Python is now best coding language in the world. It is the inspiration for many coding languages such as Ruby, cobra, Swift Go, Julia.

3. Explain all the operators in python.

A. (1) Arithmetic operators. These are used to perform mathematical operations like addition, subtraction, etc.

Ex +, -, *, /, //, %, **

(2) Relational operators. These compare the values. They return true (or) false.

E $>, <, ==, !=, >=, <==$

(iii) Logical operator These perform AND, OR and
   Not operator

   E   and, or, not

(iv) Bit wise operator

   $\&, |, \sim, \wedge, >>, <<$

(v) Assignment operator

   $=, +=, -=, *=, /=, \%=, //=, \&=,$
   , $|=, !=$ $\wedge=, >>=, <<=$

(vi) Special operator

   is, is not, in, not in

4. Features of python
   1. Easy to code
   2. Free and open source
   3. Object-oriented language
   4. GUI programming support
   5 High-level language
   6. Extensible feature
   7. Python is portable language

8- Python is integrated language

9- Interpreted language.

10- Large standard library.

11- Dynamically Typed language

5- Justify why python is interactive interpreted
   language

Ans- Python is interpreted OOP. Unlike c, ~~tot~~
   is interpreted line by line in machine
   readable byte-codes. It is interactive.
   when a statement is enterd, and is followed
   by return key. If appropriate, the
   result will be printed on screen, immediate
   in the next line. This interactive is
   invoked by typing python in command
   prompt