ASSIGNMENT -02

1. what are data types in python ? Explain.

- **integer :** Positive or negative whole numbers are the integer data types in python.

- **Float :** Any real number with a Floating point represents in which a Fractional component is denoted by a decimal symbol or scientific notation.

- **complex number :** A num with a real and imaginary component represented as $x+yi$, x and y are Floats and j is -1

- **Boolean :** Data with one of or two built-in-values True or False Notice that T or F are capital true or False are not valid because python will throw an error for them.

- **string :** A string value is a collection of one or more characters put in single, double and triple quotes.

- **list :** A list objects is an ordered collection of one or more data items not necessarily of the same type, put in square brackets.

- **Tuple :** A tuple object is an ordered collection of one or more data items, not necessarily of the same types put in paranthesis.

2. Explain Breifly the history of python?

python was created by guido von Rossum in 1980 to 1990. He was a member of the national science Reaserch institute of mathematics and computer science intially it was designed as a response to the ABC programer language was that python had expectation handing and was targeted for Ameeba operating system. the name python is named From the British TV show monty python. In addition to exception handling python included classes, lists and strings.

3. Explain operators in python?

• Arithmetic operators are addition, subraction, multiplication, Division, Floor division, modulue, Exponetion.

• Relational operators :<, >, <=, >= , == ;

• Assignment operators : +=, =, -=, *= , /=, %=, //=, **= , &=, |= ,^= ,>>=, <<=

• comparision operators : == ,!= ,>, <,<= , >=

• logical operators = and, or, not.

• membership operators : in, not in,

• Bitwise operators : &, |, ^, ~, <<, >>

4. Explain Features of python?

Easy to code
Free and open source
Object oriented language.
GUI programing set.
High-level language.
Extensible Feature.
python. is portable language.
python is integrated language.
large standard library.
Dynamically typed language.

5. justify why python is interpreted language.

unlike c/c++ etc. python is an interpreted object oriented programing language. The compiler which is a compiled programing language. The compiler translates the whole code in one-go rather than line by line. This is the reason why in c language all the errors are listed during ~~complet~~ compilation only.