Assignment - 2

1. What are the data types in phython?

Basic Data types in python

- Integers.
- floating-point Numbers.
- complex Numbers.
- String. Escape sequences in strings. Raw strings. Triple - Quoted strings.
- Boolean Type, Boolean Context, and Trothiness.
- Built .In Fundions;-Math.Type Conversion. Iterables and Iterators. Composite Data type, Classes, Attributes and Inheritance, Miscellaneous.
- Conclusion,

2. Briefly Explain history of phython.

Python was conceived in the late 1980's by Guido van Ressom at centrom coiskunde & Information (CWI) in the Netherlands as a successor to the ABC language (Itself inspired by SETL), Capable of Exception handling and Interfacing with the Amoeba operating system. It's implementation began in December 1989

Softcoare : C. python, peyco, Naitka. sagemath .

3. Explain the features of python.

Python is a dynamic high level, free open source and interpreted programming language. It supports object oriented programming as well as procedural oriented programming. In python, we don't need to declare the type of variable because it is a dynamic typed language.

Features in 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 languge. etc.

4. Explain all the operators in python.

(i) Arithematic operators :- Addition   (+)

                           Subtration   (-)

                           Multiplication (*)

                           Division   (/)

                           Modulus   (%)

                           (**) Exponentiation

                           Floor division   (//)

(ii) Assignment operators :- To assign values to variable

     " = ", ' += ' , -= , /= , *= , %=, //=, **= , &=,

     |=, ^=, >>=, <<= .

(iii) Compceision operators :-

       = = , != , > , < , >= , < =

(iv) logical operators :- and, or, not .

(v) Identify operators :- is, is not .

(vi) . python member ship operators :- in , not in .

(vii) Bitwis operators :- &, |, ^, ~, <<, >>

5. Justify why python is interactive interpreter

   (.py) files are run in the python interpreter. Interactive mode is a command line shell which gives immediate feedback for each statement, while running previously fed statement in active memory. As new lines are fed into the interpreter, the fed program is evaluated both in part an in whole.