Python Work Shop

Assignment - 2

* What are the data types of in python ? Explain.

Integer:- Positive or negative whole number ~~with~~ a floating point. Represents are the integers datatypes in python

Float:- Any real number with a floating point Represents in which a fractional component is denoted by a decimal symbol or scintific notation

Complex Number:- A number with a Real and imaginary component Represented as x+yj, x and y are Floats and 'j' is -1

Boolean :- Data with one or two built-in values True or false Notice that T and F are Capital True and false are not valid booleans and python will throw an Error for them

String:- A string value is a collection of one or More characters put in single, double or triple quotes

lists :- A list object is an ordered collection of one or More data items not neccessaily of the same type put in square brackets

Ex:- A type object in an [illegible] of one or more data item not necessarily of the same types put in parentless

* Explain the history of Python?

Python was created by Guido van Rossum in 1980 to 1990 he was a member of the national Research institute of Mathematics and Compute Science initially it was designed as a Response to the ABC Programme language was that Python had Expectation handling and was targeted for the Ameoba 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

* Explain the operation in python?

Operators in python are

Arthemetic operator
Relational operator
Assignment operator
logical operator
Membership operator

Identify operator

Bit Wise operator

* Arithmetic operator are addition, subtraction, Multiplication, Division, Floor division, Modules Exponation
* Relational operators are <, >, <=, >=, ==, !=
* Assignment operators are +=, -=, *=, /=, %=, **=
* logical operator are and, as, not
* Membership operator are: in, notin
* Identify operator are is, isnot
* BitWise operator are Binary and(&)
  Binary (or)(|)
  Binary XOR(^) ~ : <<, >>

* Explain features of Python?

Easy-to code

Free and open source

object oriented language

GUI programming support

High - level language

Extensible feature

Python is portable language

Python is integrated language

large standered ~~liber~~ library

Dynamically typed language

Justify: Why Python is interpreted language?

Unlike c/c++ etc. Python is an interpreted object oriented programming language the compiler which is a compiled programming 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 Complication only.