Python -python is a general purpose high level programming language

High level - very easy - easy to learn and implement

General Purpose-

Software Development

Game Development

Web Development

AI

Data Science

Ethical Hacking

Automation testing with selenium

Python - 1991 - Guido Van Rossum - Monty’s Python Flying Circus.

Features:

1.Dynamically Typed Programming

2.Interpreted Programming

3.Open Source

4.it has its own set of libraries

5.multi paradigm programming

a. Procedural

b. Functional

c. OOP - Object Oriented programming

Variables

X = 15;

X -> variable

15->constant

Identifiers : user defined names used for class, function,interface,object,variables etc.

1.Identifiers name cannot contain any special character(except \_) or space

2.cannot starts with number or any special character other than \_

Data Types:

1.number - int,float,complex

2.None

3.String - “hi” , ‘hi’ , ‘’’ hi ‘’’

String is python’s ordered and immutable data type

4.Boolean

Data Collection

1.List

2.Tuple

3.Dictionary

4.Sets

5.Frozen Set (immutable version of Set)

Keywords?

Predefined words which has special functionality

Break,continue,pass,if,elif,else , def, class, except, try, finally etc

Operators:

Arithmetical Operator

+,-,/,\*,\*\*,%,//

Relational

Logical

Bitwise

Membership operator - in , not in

Assignment operator -

Identity operator - is , is not

If -else

Q1. Find distance between/w 2 points

Q2. WAP to find roots for equation ax^2+bx+c.

And also state its nature of roots

Q3.WAP to check whether String is pallindrome or not.

Q4.WAP to remove a word from a String.

Q5.WAP to find occurrence of each character of

String.

Ex - X = “aabbccc”

Result :

a = 2

b = 2

c = 3