**Introduction of python,If, If- else, Nested if-else,while,for-loop**

**Assignment Level Basic**

1. What is Python, Name some of the features of Python.

Python is Object Oriented Programming Language. A high level programming language that is easy to learn than other programming languages, like Java , C , C++ etc.

Features of Python Are as follows :

* Easy to learn
* Short syntax lines
* Easily understanding code
* Fast coding and time saving
* Python can run in any platform.

1. Is python the right choice for Web based Programming?

Yes, python is right choice for web programming because it develops web applications in less time than any other web development tools.

Python has its own frameworks which make them easy for less code and flexible web application development.

One of the reason why python is right choice is that the python supports external libraries other than its own.

1. Why was the language called as Python?

When Guido van Rossum began implementing Python he was also reading the book “Monty Python’s Flying Circus”, he thought he needs a name which is short and unique, so he named this language python.

1. What is the language from which Python has got its features or derived its features?

Python is derived from many languages like, ABC, Modula-3, C, C++, Algol-68, Small Talk, Unix Shell and other scripting languages.

1. Does python support switch or case statement in Python? If not what is the reason for the same?

Python does not support switch case statement despite of being common feature in every language.

The reason says that , back in 2006, PEP 3103 was raised, recommending the implementation of a switch case statement. However, after a poll at PyCon 2007 received no support for this feature, the Python Developers Dropped idea of switch case statement.

1. How Python is interpreted?

Python is an interpreted language, which means the source code of a Python program is converted into bytecode that is then executed by the Python virtual machine. Python is different from major compiled languages, such as C and C + +, as Python code is not required to be built and linked like code for these languages.

Python converts source code written by the programmer into intermediate language which is again translated into the native language / machine language that is executed. So Python is an Interpreted language.

1. How memory is managed in Python?

The python memory manager manages chunks of memory called **Blocks**. A collection of blocks of the same size makes up the **Pool.** Pools are created on Arenas, chunks of 256kB memory allocated on heap=64 pools. If the object get destroyed, the memory manager fills this space with a new object of the same size.

1. What is namespace in Python?

A namespace in python is a collection of currently defined symbolic names along with information about the object that each name references. You can think of a namespace as a dictionary in which the keys are the object names and the values are the object themselves.

1. What is the purpose continue statement in python?

Continue Statement is used in loop to Start or Continue the loop after Skipping Unwanted value.

**String manipulation Accessing String,Basic Operation,String slice,Function and method**

**Assignment Level Basic**

1. What are negative indexes and why are they used?

The negative index is used to remove any new line spaces from the string and allow the string to except the last character as index [-1]. The negative index is also used to show the index to represent the string in correct order.

1. Explain split(), sub(), subn() methods of “re” module in Python.

Split() : the split method splits strings into substrings. And it prints its output in list from.

Sub() : the sub method is function built in “re” module that handles regular expression.

Subn() : the subn method returns a tuple with count of total of all the replacements as well as the new string.

1. How do you perform pattern matching in Python? Explain

In the real world, string parsing in most programming languages is handled by regular expression. Regular expression in a python programming language is a method used for matching text pattern.

The “re” module which comes with every python installation provides regular expression support.

Regular expressions are complicated mini-language. They rely on special characters to match unknown strings, such as letters, numbers, and the space character, which always match themselves.