Interview Question

TCS Interview 14-06-2021

1. What is Generators ?

Ans:

Generators is a function which returns an iterator object (list) with sequence of value instead of single value. Generator uses Yield statement instead of Return statement.

1. How to create a virtual Environment?

Ans:

1. What is the function of self-variable?

Ans:

**self** represents the instance of the class. By using the “**self**” keyword we can access the attributes and methods of the class in **python**. It binds the attributes with the given arguments

1. What is the difference between Module and Package?

**Module**: The **module** is a simple **Python** file that contains collections of functions and global variables and with having a . **py** extension file. ... **Package**: The **package** is a simple directory having collections of **modules**.

1. What is Pickling And Unpickling ?

Pickling: It is a process where a Python object hierarchy is converted into a byte stream.

Unpickling: It is the inverse of Pickling process where a byte stream is converted into an object hierarchy.

1. What is \*Args and \*\*Keywargs ?

***\*args:***used to pass a variable number of arguments to a function. It is used to pass a non-key worded, variable-length argument list.

***\*\*kwargs*** is used to pass a keyworded, variable-length argument list

1. What is the difference between List and Tuples?

| **LIST** | **TUPLE** |
| --- | --- |
| Lists are mutable | Tuples are immutable |
| Implication of iterations is Time-consuming | The implication of iterations is comparatively Faster |
| The list is better for performing operations, such as insertion and deletion. | Tuple data type is appropriate for accessing the elements |
| Lists consume more memory | Tuple consume less memory as compared to the list |
| Lists have several built-in methods | Tuple does not have many built-in methods. |
| The unexpected changes and errors are more likely to occur | In tuple, it is hard to take place. |

1. Memory Management in the python?
2. What are local and Global Variable?

variable declared outside of the function or in global scope is known as a global variable. This means that a global variable can be accessed inside or outside of the function.

A variable declared inside the function's body or in the local scope is known as a local variable

1. Is python Case sensitive ?

yes

1. \_\_init\_\_ function pyhton ?

The **\_\_**init**\_\_** method is similar to constructors in C++ and Java . Constructors are used to initialize the object's state. The task of constructors is to initialize(assign values) to the data members of the class when an object of class is created.

1. What is the sliceing ?

slicing is an operation that extracts a subset of elements from an array

1. What is range and Xrange ?

**difference** is that **range** returns a Python list object and **xrange** returns an **xrange** object. ... It means that **xrange** doesn't actually generate a static list at run-time like **range** does. It creates the values as you need them **with a** special technique called yielding

1. What are the ternary operator ?

The **Python ternary operator** lets you evaluate whether a condition is true or false.

1. How to remove value from the list ?

Remove(“element”) , pop(“index”) , del “element”[“index”]

1. How to add value for a list?

Appende() , extend() , insert()

1. What is the split method?

split() method splits a string into a list. You can specify the separator

1. Multiple Inheritances supported in python ?

Yes, A class can be derived from more than one base class in **Python**, similar to C++. This is called **multiple inheritance**.

1. Indentation required in python ?

To indicate a block of code in **Python**, you must **indent** each line of the block by the same whitespace.

1. Break and continue in python ?

The continue statement is used to skip the rest of the code inside a loop for the current iteration only. Loop does not terminate but continues on with the next iteration.

If the break statement is inside a nested loop (loop inside another loop), the break statement will terminate the innermost loop.

1. Python accept negative index ?

**Python** programming language supports **negative indexing** of arrays, something which **is** not available in arrays in most other programming languages.

1. What are some python module?

A file containing **Python** code, for **example**: **example**.py , is called a **module**, and its **module** name would be **example** . We use **modules** to break down large programs into small manageable and organized files.**modules** provide reusability of code.