Q.1 What is python ?

Ans:- Python is a high-level, interpreted and object-oriented programming language. Work on all operating systems.

Q.2 What is an Interpreted language ?

Ans:- An Interpreted language executes its statements line by line. Programs written in an interpreted language runs directly from the source code, with no intermediary compilation step.

Q.3 What is \_\_init\_\_?

Ans:- \_\_init\_\_ is contructor method in Python and is authomatically called to allocate memory when a new object is created. All classes have a \_\_init\_\_ method associated with them. It helps in distinguishing methods and attributes of a class from local variables.

Q.4 What is Slicing in Python ?

Ans:- As the name suggests, slicing is taking part of.

Syntax for the slicing is [ start : stop : step ]

start is the starting index from where to slice a list or tuple.

stop is the ending index or where to stop.

step is the number of step to jump.

Eg. numbers = [1,2,3,4,5,6,7,8,9,10]

print(numbers[1 : : 2]) #output : [2, 4, 6, 8, 10]

Q.5 What is the difference between python Arrays and Lists ?

Ans:- Arrays in python can only contain element of same data type , data type of array should be homogeneous.

Lists in python can contain element of different data type , data type of lists can be heterogenous. It has the disadvantage of consuming large memory.

Q.6 What is Lambda in Python ?

Ans:- Lambda is an anonymous function in Python, that can accept any number of arguments, but can only have a single expression. It is generally used in situation requiring an anonymous function for a short time period.

Q.7 Explain Split( ), Join( ) in Python ?

Ans:- You can use split( ) function to split a string basaed on a delimiter to a list of string.

You can use join ( ) function to join a list of strings based on a delimiter to give a single string.

Q.8 What are Keywords in Python?

Ans: Keywords in python are reserved words that have special meaning. They are generally used to define type of variables. Keywords cannot be used for variable or function names. There are following 33 keywords in python-

**Keywords:**

1. And
2. Or
3. Not
4. If
5. Elif
6. Else
7. For
8. While
9. Break
10. As
11. Def
12. Lambda
13. Pass
14. Return
15. True
16. False
17. Try
18. With
19. Assert
20. Class
21. Continue
22. Del
23. Except
24. Finally
25. From
26. Global
27. Import
28. In
29. Is
30. None
31. Nonlocal
32. Raise
33. Yield

Q69. Does python support multiple inheritance?

Ans: Multiple inheritance means that a class can be derived from more than one parent classes. Python does support multiple inheritance, unlike Java.

Q.10 What are local variables and global variables in Python?

**Global Variables:** Variables declared outside a function or in global space are called global variables. These variables can be accessed by any function in the program.

**Local Variables:** Any variable declared inside a function is known as a local variable. This variable is present in the local space and not in the global space.

Q. 11 What are functions in Python?

Ans: A function is a block of code which is executed only when it is called. To define a Python function, the def keyword is used.

Q.12 What are the generators in python?

Ans: Functions that return an iterable set of items are called generators

Q.13 What are python iterators?

Ans: Iterators are objects which can be traversed though or iterated upon.

Q.14 How to remove values to a python array?

Ans: Array elements can be removed using pop() or remove() method. The difference between these two functions is that the former returns the deleted value whereas the latter does not.

Example: a=arr.array('d', [1.1, 2.2, 3.8, 3.1, 3.7, 1.2, 4.6])

print(a.pop())

print(a.pop(3))

a.remove(1.1)

print(a)

Output: 4.6

3.1

array(‘d’, [2.2, 3.8, 3.7, 1.2])

Q.15 Define encapsulation in Python?

Ans: Encapsulation means binding the code and the data together. A Python class in an example of encapsulation.

Q.16 What is namespace in Python?

Ans:- A namespace is a naming system used to make sure that names are unique to avoid naming conflicts.

Q.17 What is swapcase function in Python?

Ans:- It is a string’s function that converts all uppercase characters into lowercase and vice versa. It is used to alter the existing case of the string. This method creates a copy of the string which contains all the characters in the swap case.

For Example: string = "GeeksforGeeks"

string.swapcase() ---> "gEEKSFORgEEKS"

Q.18 Example of mirror dimension.

Ans:-Mirror Dimension:-

word=input("enter a word =")

y=word[::-1]

print(y)

Q.19 What is difference between / and // in Python?

Ans:- // represents floor division whereas / represents precised division.

For Example:- 5//2 = 2

5/2 = 2.5

Q.20 Left triangle star pattern.

Ans:

n = 5

for i in range(1, n+1):

for k in range(1, i+1):

print("\*", end="")

print()

Output:

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