

Python Interview Questions.

By: @curious_.programmer

1] What is python?

- Python was created by Guido van Rossum , and in 1991.
- Web applications are made by python with the help of servers.
- Python handles huge amount of data & perform mathematics.
- Python works on different platform like Mac, Linux, Windows, Raspberry Pi etc).
- Python is a object oriented programming language.
- Python is high level & most popular programming language.

2] Is the python case sensitive language.

→ Yes, Python is a case sensitive language.
Because it differentiates the lower case & upper case identifiers.

3] What is Lambda function in python?

- Lambda Function in python having no name.
- Lambda forms are utilized to construct anonymous functions.
- Normal functions are defined by def keyword but unnamed functions defined by lambda keyword.

example:-

```
adder = lambda x, y: x + y  
print (adder (4, 8))
```

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4] What are the advantages of Python?

- Python is very flexible & extensible language.
- Python is object oriented programming language.
- In python there are Tuple, list and dictionary
• are useful data structure is present in the language.
- Python runs on various platform like Mac, windows, Linux, raspberry pi etc.
- Python is free and open source language.

5] What is PEP 8?

- In python PEP 8 has appears as the style guide that most projects hold to it.
- It provides a very readable and eye-pleasing coding style.
- A full form of PEP is Python Enhancement Proposal.
- PEP 8 recommends use 4 spaces to ~~to~~ show indentation and tabs should only be used to maintain consistency in the program.

6] What is self in python? @curious_programmer

- By using self keyword we can access the attribute & methods of class in python.
- The self keyword is used to represent the instance of the class.
- The self variable in the init method refer to the newly created object while in other methods.
- Self is also used to refer to a variable field within the class.
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7] What is Init function in python?

- `_init_` is one of the reserved method in Python.
- The `_init_` method can be called when an object is created from the class.

- All classes have a function called `_init_()`, which is always executed when the class is being initiated.
- Use the `_init_()` function to assign values to object properties.
- The `_init` method doesn't create the object attribute but only initialize the object's attributes.

8] What is pass in Python?

- The `pass` keyword represents a null operation in python.
- It is generally used for the purpose of filling up empty block of code which may execute during runtime.
- The `pass` statement is generally used as a placeholder.
- The `pass` statement is useful when you don't write implementation of Function.

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9] What is slice function in python.

- Python `slice()` Function is used to get a slice of elements from collection of elements.
- `slice()` function used with string, list, tuple, set, bytes or range objects.
- Syntax :-
`slice(stop)`
`slice(start, stop, step)`

10] How is memory managed in Python?

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- Memory management in python involves a private heap containing all python objects & data structure.
 - The python memory manager is deals with storage management aspects, like sharing, segmentation and caching.
 - The core API gives access to some tools for programmer to code.
 - In python there is also garbage collection is present. It recycles all the unused memory and so it makes free space in memory.

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11] What is tuple in Python?

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- A tuple is a built in data type.
 - We can stores a value in tuple.
 - A tuple in Python is similar to a list.
 - Tuples are immutable so we cannot change its values.
 - Tuples respond to the + and * operators much like strings.

12] What is an operator in Python?

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- Operator is a symbol which is used on values to produce output on it.

- Arithmetic Operators are used to performing mathematical operations like addition, subtraction, multiplication & division.
- Comparison operator compares the values and returns true or false values on condition.
- Logical operator perform Logical AND, Logical OR and Logical NOT operations. It is used to combine conditional statements.
- Bitwise operator act on bit & perform bit-by-bit operations.
- Assignment operators used to assigning values to the variables.

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13. Is the python interpreted language?

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- A Python is an interpreted Language.
 - Python language program runs directly from the code.
 - Python converts the source code into language code. And it is again translated into machine language.
 - An interpreted language is any programming language that isn't already in machine code prior to runtime.
 - Python is fall under byte code interpreted.
 - The .py code source code is first compiled to byte code as .pyc .

14] What are Python iterators.

- . The iterators are objects which can be traversed through or iterated upon.
. Iterator contains countable number of values.
. Python iterators used to iterate object like list, tuple, and sets.
. The iterator object initialized using iter() method.

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15] Is indentation required in Python?

- . Indentation is most important for python.
. It specifies block of code. All code with in loops classes functions etc.
. It is usually done by using four space character.
. If your code is not intended necessarily.
. It will not execute accurately and will throw error as well.

16] What is namespace in Python?

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

17] What are local and global variable in Python?

- There are two types of variables local and global variables.

Local variables:-

- Local variables can only be reached within their scope.
- Any variable declared inside a function is known as a local variable. This variable is present in the local and not in the global space.

Global variables:- @curious-programmer

- A global variable can be used anywhere in the program as its scope is entire program.
- Variable declared outside a function or in global space are called global variables.
- These variables can be accessed by any function in the program.