

PYTHON INTERVIEW QUESTIONS

Part-1

1]. What type of language is Python? Programming or scripting?

- Python is capable of scripting, but in general purpose programming language.

2]. How is Python an interpreted language?

- An interpreted language is any programming language which is not in machine level code before runtime. Therefore, Python is an interpreted language.

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3]. What is PEP 8?

- A name **PEP** stands for Python Enhancement proposal. It is a set of rules that specify how to format Python code for maximum readability.

4]. How is memory managed in Python?

- • Memory management in Python is managed by Python private heap space. All Python objects and data structures are located in private heap. The programmer does not have access to this private heap. The Python interpreter takes care of it instead.
- The allocation of heap space for Python objects is done by Python's memory manager. The core API gives access to some tools for the programmer to code.

- Python also has an inbuilt garbage collection which recycles all the unused memory and so for that it can be made available to the heap space.

5]. What is namespace in Python?

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

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6]. What are Python modules? Name some commonly used built in modules in Python?

- Python modules are files containing python code. This code can be functions classes or variables. A python module is a .py file containing executable code.

Some of the commonly used built-in modules are:

• os • sys • datetime • json .

7]. What are local and global variable in Python?

- **Global Variable :-**

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 and not in the global space.

8]. Is Python case sensitive?

- Yes, Python is a case sensitive language.

9]. What is type conversion in Python?

> Type conversion refers to the conversion of one data type into another.

For ex. `int()` , `float()` , `set()` , `list()`.

10]. Is Indentation required in Python?

> Indentation is necessary for python. It specifies a block of code. All code within loops classes function etc within an indented blocks. It is usually done using four space character. If your code is not indented necessarily. It will not execute accurately and will throw errors as well.

11]. What are functions in Python?

> 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.

```
def Newfun():  
    print("Hi")
```

12]. What is `__init__`?

> `__init__` is a method or constructor in python. This method is automatically called to allocate memory when a new object of a class is created. All classes have the `__init__` method. For eg:-

```
class Emp:  
    def __init__(self, name):  
        self.name = name  
E1 = Emp("xyz")  
print(E1.name)
```

13]. What is lambda function?

> An anonymous function is known as a lambda function. This function can have any number of parameters but have just one statement.

example:-

```
a = lambda x, y: x + y  
print(a(5, 6))
```


14]. What is self in python?

- Self is an instance or an object of a class. In python, this is explicitly included as the first parameter. This is not the case in java where it's optional. It helps to differentiate between the methods and attributes of a class with local variables. The self variable in the init method refer to the newly created object while in other methods, it refers to the object whose method was called.

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15]. What are Python Iterators?

- Iterators are objects which can be traversed through or iterated upon.

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INTERVIEW QUESTIONS PART-2

1]. What is Pickling and Unpickling?

- Pickle module accepts any python object and convert it into string representation and dump it using dump function, this process is called pickling. While the process of retrieving original python objects from the stored string representation is called Unpickling.

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2]. What are generators in python?

- Functions that return an iterable set of items are called generators.

3]. How you will capitalize the first letter of string?

- In python, the capitalize () method capitalizes the first letter of string. If the string already consists of a capital letter of the beginning, then, it returns the original string.

4]. What are docstring in python?

- Docstring are not actually comments, but they are documentation strings. These docstrings are within triple quotes. They are not assigned to any variable and therefore, at times, serve the purpose of comments as well.

example:-

```
"""  
    using docstring as a comment  
"""
```

```
x=8  
y=2  
z=x/y  
Print ( z )
```


5]. What are built-in types of Python?

- • Integers
- Floating-Point
- Complex number
- String
- Boolean
- Built-in function.

6]. Define encapsulation in Python?

- Encapsulation means binding the code and data together. A Python class is an example of encapsulation.

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7]. What does an object() do?

- It returns a featureless object that is a base class for all classes. Also it does not take any parameter.

8]. How to create empty class in python?

- The empty class is a class that does not have any code defined within its block it can be created using the pass keyword. However, you can create object of this class outside the class itself. In python the pass command does nothing when its executed. its a null statement.

example :-

```
class a:  
    pass  
obj = a()  
obj.name = "XYZ"  
Print ("Name = " Obj.name)
```

9]. Does Python support multiple inheritance?

- Multiple inheritance means that a class can be derived from more than one parent classes. Python does support multiple inheritance. unlike java.

10]. What is Polymorphism in python?

- Polymorphism means the ability to take multiple forms so far instance. If the parent class has a method named ABC then the child class also can have method with same name ABC having its own parameter and variable python allows polymorphism.

11]. How do you do data abstraction in Python?

- Data abstraction is providing only the required details and hiding the implementation from the world. It can be achieved in python by using interface and abstract class.

12]. How to import modules in python?

- Modules can be imported using the import keyword. You can import modules in three ways.

example:-

- ①. import array
- ②. import array as arr
- ③. from array import *

13]. What is split used for?

- The split() method is used to separate a given string in python.

example:-

```
a = "edureka Python"  
print(a.split()).
```


14]. Does Python have OOPS concept?

➤ Python is an Object Oriented Programming language. This means that any program can be solved in python by creating a model. However, python can be treated as procedural as well as structural lang.

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15]. How to add values to python array?

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➤ Elements can be added to an array using the `append()`, `extend()` and `insert(i, x)` function.

① `append()`

② `extend()`

③ `insert()`.

PYTHON INTERVIEW QUES.

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example:-

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objname = "xyz"  
print (Name = "Object.name")
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