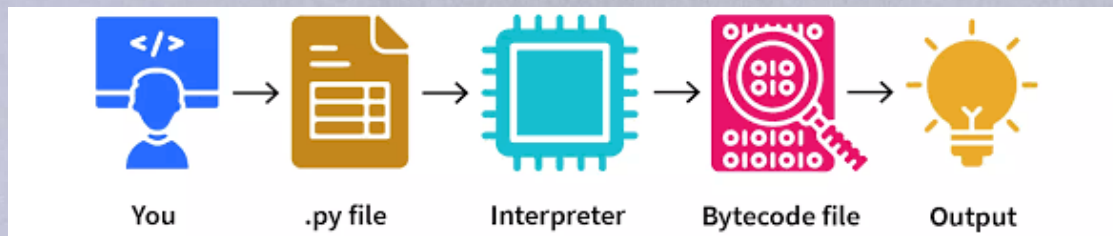




## 1. What is Python?

- Python was created by Guido van Rossum, in 1991.
- Web application 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.

A normal functions are defined by lambda keyword.

example :-

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

## 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, window, 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 code style.
  - A full form of PEP is Python Enhancement Proposal.
  - PEP 8 recommends use 4 space to show indentation and tabs should only be used to maintain consistency in the program.

### 6. What is self in Python?

- • 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.

### 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 class 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 created the object but only initialize the object's attributes.



## 8. What is Pass in Python?

- • The Pass keyword represent 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 implement of function.

## 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?

- • 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.

## 11. What is tuple in Python?

- • 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?

- Operator is a symbol which is used on values to produce output on it.
- Arithmetic operators are used to performing mathematical operations like addition, subtract, 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.

## 13. Is the python interpreted language?

- 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 iterator used to iterate object like list, tuple, and sets.
- The iterator object initialized using `iter()` method.

## 15. What is namespace in Python?

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



## 16. 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 using four space character.
  - If your code is not intended necessarily.
  - It will not execute accurately and will through error as well.

## 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:-

- 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.