

Q1.Who developed python programming ?

Ans: Guido Van Rossum

Q2.Which type of python programming does python support?

Ans: 1).Object oriented programming

2).Imperative programming

3).Functional programming

4).Procedural programming

5).Scripting

6).Declarative programming

7).Web development

8).Data science and machine learning

9).Automation

10).Scientific computing

Q3.Is python case sensitive when dealing with identifiers?

Ans: Yes python is case-sensitive when dealing with identifiers

such as variables names function names and class names

In python the difference between uppercase and lowercase letters

is significant and they are treated as distinct characters

for example

```
my_variable = 10
```

```
My_variable = 20
```

```
print(my_variable)
```

```
print(My_variable)
```

In this example `my_variable` and `My_variable` are treated as two different identifiers because python is case - sensitive when you run this code we will get the following output

10

20

Q4.What is the correct extension of the python file ?

Ans : The correct extension of the python file are `.py`

Q5.Is python code compiled or interpreted?

Ans: python code is both compiled and interpreted

Q6.Name few blocks of code used to define in python language?

Ans : The few block of code are :

1).Function

```
def function_name(parameters):  
    pass
```

2).Classes

```
class className  
    pass
```

3)loops

```
for variables in iterable  
    pass
```

or

While condition

```
pass
```

4)Conditional statements

if condition:

```
pass
```

elif another_condition

```
pass
```

else:

```
pass
```

5).List

```
my_list = [elemnt1, element2,.....elemnetN]
```

6).Dictionaries

```
my_dict = {Key1 : value1 , key2:value2 ....keyN:ValueN}
```

Q7).State a character used to give - single line comments in python ?

Ans : The character used to give single-line comments in python is the

hash symbol "#"

Q8).Mention function which can help us to find the version of python that we are currently working on ?

Ans : There are two functions that can help you find the version of python you are current working on

1).sy.version

2).platform.python version

Q9).Python supports the creation of anonymous functions at runtime , using a construct called -----

Ans: Lambda function

10).What does pip stand for python?

Ans: "pip installs packages"

11).Mention a few built in function in python

Ans: print() , len(), range(), list(), int(), float(), str(),
sum(), max()

Q12).What is the maximum possible length of an identifiers in python?

Ans:In python , there is no maximum length of an identifiers. Identifiers can be
be of any length and python will not complain or truncate them. However its worth nothing
that very long identifiers can make your code harder to read and understand so its generally
a good idea to keep them resonably short and descriptive

Q13).What are the benefits of using python?

Ans:The benefits of using python are :

- 1)Easy to learn and use
- 2)Variable and multi-purpose
- 3)Large Standard library
- 4)Extensive support libraries and function
- 5)Cross platform compability

Q14).How is memory managed in python ?

Ans: Memory management in python is handled automatically by the python memory manager which
which includes several components working together to efficiently and deallocate memory as needed .

Here's an overview of how memory is managed in python

- 1).Automatic memory management
- 2).Reference counting
- 3).Garbage collection
- 4).memory pools and Arenas
- 5).Dynamic typing and memory
- 6).memory leaks
- 7).memory optimization

Q15).How to install python on windows and set path variables ?

Ans :Download the python installer from the official websites

Run the installer and check the add python to path option
during installer

Verify the instalation by checking the python and pip version in command
prompt

Manually set the path variable if needed

The setup allows to run python any command prompt window and easily install and manage package using pip

Q16).Is indentation required in python?

Ans:Yes indentation is required in python and is an essential part of the languages syntax

Unlike many other programming languages that use braces {} or keywords to defined code blocks
, python users indentation to blocks , python uses indentation to blocks python uses indentation
to indicate the structure of the code .