Python Interview Questions Part 4

1. Mention the use of // operator in Python?
It is a Floor Divisionoperator , which is used for dividing two operands with the result as quotient showing only digits before the decimal point. For instance, 10//5 = 2 and 10.0//5.0 = 2.0.

2. Mention five benefits of using Python?
- Python comprises of a huge standard library for most Internet platforms like Email, HTML, etc.
- Python does not require explicit memory management as the interpreter itself allocates the memory to new variables and free them automatically
- Provide easy readability due to use of square brackets
- Easy-to-learn for beginners
- Having the built-in data types saves programming time and effort from declaring variables

3. Mention the use of the split function in Python?
The use of the split function in Python is that it breaks a string into shorter strings using the defined separator. It gives a list of all words present in the string.

4. What is __init__?
__init__ is a method or constructor in Python. This method is automatically called to allocate memory when a new object/ instance of a class is created. All classes have the __init__ method.

5. 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.

6. Is indentation required in python?
Indentation is necessary for Python. It specifies a block of code. All code within loops, classes, functions, etc is specified within an indented block. It is usually done using four space characters. If your code is not indented necessarily, it will not execute accurately and will throw errors as well.

7.What is type conversion in Python?
Type conversion refers to the conversion of one data type iinto another.
int() – converts any data type into integer type
float() – converts any data type into float type
ord() – converts characters into integer
hex() – converts integers to hexadecimal
oct() – converts integer to octal
tuple() – This function is used to convert to a tuple.
set() – This function returns the type after converting to set.
list() – This function is used to convert any data type to a list type.

dict() – This function is used to convert a tuple of order (key,value) into a dictionary.

str() – Used to convert integer into a string.

complex(real,imag) – This functionconverts real numbers to complex(real,imag) number.

8. 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. However, 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 refers to the newly created object while in other methods, it refers to the object whose method was called.

9. How will you capitalize the first letter of string?

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

10. How to comment multiple lines in python?

Multi-line comments appear in more than one line. All the lines to be commented are to be prefixed by a #. You can also a very good shortcut method to comment multiple lines. All you need to do is hold the ctrl key and left click in every place wherever you want to include a # character and type a # just once. This will comment all the lines where you introduced your cursor.