

Q.1 What is the difference Bto function & method in Python?

Function

it is a block of code which only runs when it is called. there are some built-in function which are part of Python

Method

Methods are functions that are associated with an object or class in Python programming

Q.2 Explain the concept of function arguments & parameter in Python

Function arguments → the value that are sent to the function when it is called.

Parameter arguments → A parameter is the variable listed inside the parentheses in the function definition.

→ The Arguments and parameter can be used for the same thing - information that are passed into a function.

Q.3 What are the different way to define and call a function in Python?

def keyword used to define the function. then write the function identifier (name) followed by parentheses and a colon.

Ex →

```
def CR7():  
    print("CR7 is a goat")
```

to call this function just write -

```
CR7()  
CR7 is a goat.
```

different way to call the function -
→ directly function call.
→ used partial()
function.
→ use dict()
→ use Global().

Ques⁷ What are the advantages of using generators in Python over regular functions?

Regular function that use return to provide a single value, generator functions use yield to produce a sequence of value on demands. This allow generator to be memory efficient and capable of representing infinite streams of data.

Ques⁸ What is a lambda function in Python and when is it typically used?

lambda function are anonymous function that can be assigned to variable they can have only a single expression, not multiple statement or return statement. lambda function do not support default argument

→ it used to make short hand code -

Ques⁹ Explain the purpose and usage of the map() function in Python.

The map() function is used to apply a given function to every item of an iterable such as list, tuple, and return a map object which is iterator.

Ex → $S = [1, 2, 3, 4, 5, 6]$

```
def add(x)
```

```
    return x+10
```

```
list(map(add, l))
```

output → $[11, 12, 13, 14, 15, 16]$.