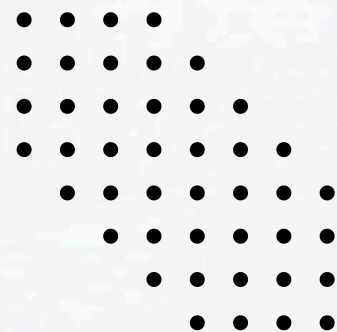TOPSTechnologies

Advance Python Programing

Presented for :

TOPs Technologies

Presented by :

Sumit B Yadav

Que 1

Introduction to print() function -

The print() function in Python is used to display output to the console. It is one of the most commonly used functions, especially for debugging and displaying messages.

syntax :
print(object, ..., sep=' ', end='\n', file=sys.stdout, flush=False)

- object: The data you want to print (string, number, list, etc.).
- sep: (Optional) Specifies the separator between multiple objects (default is a space ' ').
- end: (Optional) Defines what is printed at the end (default is a newline '\n').
- file: (Optional) The output stream (default is sys.stdout).
- flush: (Optional) If True, forces output to be written immediately.

example :

print("Hello, World!") # Prints Hello, World! to the console

Changing the End Character :

By default, print() adds a newline (\n), but you can change it using the end parameter.

Que 2

Formatting outputs using f-strings and format():

Python provides multiple ways to format strings dynamically, and two of the most commonly used methods are f-strings (introduced in Python 3.6) and the .format() method.

1. Using f-strings (Formatted String Literals)
f-strings allow you to embed expressions inside string literals using {} and prefixing the string with f.

example :

a. Basic Syntax
variable = "World"
print(f"Hello, {variable}!")
# Output: Hello, World!

b. Formatting Number :
pi = 3.14159
print(f"Pi to 2 decimal places: {pi:.2f}")
# Output: Pi to 2 decimal places: 3.14

2. Using .format() Method
The .format() method provides another way to format strings and is compatible with older Python versions.

syntax :
name = "Bob"
print("Hello, {}!".format(name))
# Output: Hello, Bob!

positional argument :
print("I have {} apples and {} oranges.".format(5, 3))
# Output: I have 5 apples and 3 oranges.

named argument :
print("My name is {name} and I am {age} years old.".format(name="Alice", age=25))
# Output: My name is Alice and I am 25 years old.