

Assignment-1

How to display output in Python

(i) Using formatted string literals.

Python string formatting using f string:→

Example:→ name = 'kunal'

```
print(f'hello {name}! How are you?')
```

Output

Hello kunal! How are you?

(ii) Using format()

Python string formatting using format() function.

Ex →

a = 20

b = 10

sum = a + b

diff = a - b

```
print("The value of a is {} and b is {}"  
      .format(a, b))
```

```
print("{} is the sum of {} and {}".format(a, b, sum))
```

Output :-

The value of a 20 and b is 10  
30 is the sum of 20 and 10.



(iii)

using % operator

- %d → Integer
- %f → Float
- %s → string
- %x → hexadecimal
- %o → octal

```
Exc: → num = int(input("Enter a value"))
```

```
add = num + 5
```

```
print("The sum of %d", %add)
```

Q-1 Discuss the various feature of Python.

Ans> There are many feature of Python programming

- Easy to code: → Python is a high level programming language. It is very easy to learn the language as compared to other language.
- Python is portable language: - Python language is also Portable language.  
for example if we have python code for window and if want to run this code on other platform such as linux, mac then we don't need to change it, we can run this code on any platform.

Q-2 Discuss Input and output format in python.

Ans> Input from user in python: →



(i) Python get user input with a message  
 Ex:  $\rightarrow$  num = input("Enter your name")

(ii) Integer input in python

Ex:  $\rightarrow$  num = <sup>int()</sup>input("Enter a No")

Output:  $\rightarrow$

Enter value : 50

The sum is 55.

Q-37 Compare between Java/c and python (At least 7)

Java	Python
(i) Java is a static-typed programming language	(i) Python is dynamically typed programming language
(ii) Java is slower than python	(ii) Python is comparatively faster But in general It is very slow as compared to other language like c and C# etc.
(iii) Widely used and documentation is available easily	(iii) Easily written and rapid development can be done
(iv) Stable connectivity is offered by Java	(iv) weak connectivity is offered by python
(v) GUI apps and web app services	(v) Scientific and numeric computing especially ML



- |  |  |
|--|--|
| (vi) The scope of string operation in Java is very limited | (vi) The scope of string operation in python is very widespread. |
| (vii) It converts bytecode into machine-readable language  | (vii) It translates machine-independent byte code.               |

## C

## Python

- |   |  |
|---|--|
| (i) It is procedure oriented programming language               | (i) It is object oriented programming language                           |
| (ii) C executes faster  | (ii) Python program slower than C  |
| (iii) Pointer concept are available                             | (iii) Pointer are not in use   |
| (iv) C has switch statement                                     | (iv) It doesn't support switch statement.                                |
| (v) C doesn't contains a garbage collector                      | (v) Python contains a garbage collector                                  |
| (vi) The array index in C should always be positive             | (vi) In python, array index may be positive or negative                  |
| (vii) The variable is for loops doesn't increment automatically | (vii) In python increment is automatically is for loop by default of +1. |



Q-4 Discuss the function:

- Ans >
- `id()` → Returns memory location of an object.
  - `type()` → Returns the type of an object.
  - `max()` → Returns the largest item in an iterable.
  - `min()` → Returns the smallest item in an iterable.
  - `eval()` → Evaluate and execute an expression.
  - `ord()` → Convert an Integer representing the unicode of the specified character.
  - `bin()` → Return the binary version of a No.
  - `chr()` → Return a character from the specified unicode.
  - `oct()` → Convert a No. into an octal.
  - `hex()` → Convert a No into a hexadecimal value.