**Week 3 :Functions Related to (in built)**

**Task :**

**Functions –**

**Q 1. Built-in Functions:**

1. print( ) function
2. type( ) function
3. input( ) function
4. abs( ) function
5. pow( ) function
6. dir( ) function
7. sorted( ) function
8. max( ) function
9. round( ) function
10. divmod( ) function
11. id( ) function
12. ord( ) function
13. len( ) function
14. sum( ) function
15. help( ) function
16. **Print() Function :**

The print() function prints the specified message to the screen or another standard output device. The message that wants to print can be a string or any other object. This function converts the object into a string before written to the screen.

Eg. print(“Hello Python Users, From Celebal Technology !!”)

Output : Hello Python Users, From Celebal Technology !!

1. **Type() Function :**

The type() function returns the type of the specified object.

Eg. var1 = "Celebal Technology"

var2 = 200

print(type(var1))

print(type(var2))

Output : <class 'str'>

<class 'int'>

1. **Input() Function :**

The input() function allows taking the input from the user.

Eg. a = input('Enter your name: ')

print(“Hello, ” + a + “ From Sanjivani.”)

Output : Enter your name: Simran

Hello, Simran From Sanjivani.

1. **Abs() Function :**

The abs() function returns the absolute value of the specified number.

Eg. positive\_no=99

print(abs(positive\_no))

complex\_no=4+8j

print(abs(b))

Output : 99

8.94427190999916

1. **pow( ) Function :**

The pow() function returns the calculated value of x to the power of y i.e xy. If a third parameter is present in this function, then it returns x to the power of y, modulus z.

Eg. x = pow(8, 4)

print(“Power of X: ”, x)

Output : Power of X: 4096

1. **dir( ) Function :**

The dir() function returns all the properties and methods of the specified object, without the values. dir() tries to return a valid list of attributes of the object it is called upon.

For Class Objects, it returns a list of names of all the valid attributes and base attributes as well.

For Modules/Library objects, it tries to return a list of names of all the attributes, contained in that module.

If no parameters are passed it returns a list of names in the current local scope.

Eg.

class Student:

def \_\_dir\_\_(self):

return['student\_name', 'student\_rollno', 'student\_marks', 'student\_admission\_date', 'student\_address']

my\_obj = Student()

print(dir(my\_obj))

Output : ['student\_address', 'student\_admission\_date', 'student\_marks', 'student\_name', 'student\_rollno']

1. **sorted( ) function :**

The sorted() function returns a sorted list of the specified iterable object. You can specify the order to be either ascending or descending. In this function, Strings are sorted alphabetically, and numbers are sorted numerically.

Eg. tuple = ("C", "E", "L", "E", "B", "A", "L")

print(sorted(tuple))

Output : ['A', 'B', 'C', 'E', 'E', 'L', 'L']

1. **Max() Function :**

The max() function returns the item with the highest value, or the item with the highest value in an iterable.

Eg. max\_val=(2,5,7,10,15,1,8)

print(max(max\_val))

Output : 15

1. **Round( ) function:**

The round() function returns a floating-point number that is a rounded version of the specified number, with the specified number of decimals. The default number of decimals is 0, meaning that the function will return the nearest integer.

Eg. round\_no = 33.57

print(round(round\_no))

Output : 34

1. **len( ) function :**

The len() function returns the count of items present in a specified object. When the object is a string, then the len() function returns the number of characters present in that string.

Eg. str = “ Celebal ”

print(“Length of string : ” , len(str))

Output : Length of string : 7

1. **divmod( ) function :**

The divmod() is part of python’s standard library which takes two numbers as parameters and gives the quotient and remainder of their division as a tuple. It is useful in many mathematical applications like checking for divisibility of numbers and establishing if a number is prime or not.

## Syntax

Syntax: divmod(a, b)

a and b : b divides a

a and b are integers or floats

**12.** **help( ) function :**

The Python help() function invokes the interactive built-in help system. If the argument is a [string](https://www.tutorialsteacher.com/python/python-string), then the string is treated as the name of a [module](https://www.tutorialsteacher.com/python/python-module), [function](https://www.tutorialsteacher.com/python/python-user-defined-function), [class](https://www.tutorialsteacher.com/python/python-class), [keyword](https://www.tutorialsteacher.com/python/python-keywords), or documentation topic, and a help page is printed on the console. If the argument is any other kind of object, a help page on the object is displayed.

### **Syntax:**

help(object)