

**S.No: 1**

Exp. Name: **Write python program to print Hello World**

**Date: 2023-04-17**

**Aim:**

Write python program to print Hello World

**Source Code:**

printWord.py

```
print("Hello World")
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Hello World

S.No: 2

Exp. Name: ***Write a python program to get string, int, float input from user***

Date: 2023-08-26

**Aim:**

Write a python program to get string, int, float input from user

**Source Code:**

dataTypes.py

```
x=input("Enter any string: ")
print(x)
y=int(input("Enter number: "))
print(y)
z=float(input("Enter float input: "))
print(z)
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter any string:

CodeTantra

CodeTantra

Enter number:

12

12

Enter float input:

13.3

13.3

**Aim:**

Python Program to Add Two Numbers

**Source Code:**

add.py

```
a=int(input("Enter First Number "))
b=int(input("Enter Second Number "))
sum = a+b
print("Sum =",sum)
```

**Execution Results - All test cases have succeeded!****Test Case - 1****User Output**

Enter First Number

36

Enter Second Number

96

Sum = 132

**Test Case - 2****User Output**

Enter First Number

96

Enter Second Number

-85

Sum = 11

**Test Case - 3****User Output**

Enter First Number

-2

Enter Second Number

-3

Sum = -5

S.No: 4

Exp. Name: **Write a python program to Create a list and perform the following methods 1) insert() 2) remove() 3) append() 4) len() 5) pop() 6)clear()**

Date: 2023-09-04

**Aim:**

Write a python program to Create a list and perform the following methods 1) insert() 2) remove() 3) append() 4) len() 5) pop() 6)clear()

**Source Code:**

listop.py

```
n=input("Enter Elements Separated by ,(Comma) : ")
thislist=n.split(",")
n=int(input("Enter Position to Insert element : "))
num=input("Enter Element to Insert : ")
thislist.insert(n,num);
if num in thislist:
    print("Element inserted to the list")
print("Before Removing Element List : ",thislist)
rem=input("Enter Element to Remove : ")
flag=0
for i in thislist:
    if(rem==i):
        thislist.remove(rem)
        flag=1
        break
if(flag==1):
    print("Element Removed from list")
else:
    print("Element not Exist")
print("After Removing Element List : ",thislist)
add=input("Enter element to add : ")
thislist.append(add)
if add in thislist:
    print("Element added to the list")
print("After Adding Element List : ",thislist)
print("List length : ",len(thislist))
ind=int(input("Enter Element index to Remove : "))
le=len(thislist)
if(le<=ind):
    print("Index not Exist")
else:
    thislist.pop(ind)
    print("Element Removed from list")
print("Before Clearing the Elements list : ",thislist)
thislist.clear()
print("After Clearing the Elements list : ",thislist)
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter Elements Separated by ,(Comma) :
1,2,3,4
Enter Position to Insert element :
4
Enter Element to Insert :
5
Element inserted to the list
Before Removing Element List : ['1', '2', '3', '4', '5']
Enter Element to Remove :
3
Element Removed from list
After Removing Element List : ['1', '2', '4', '5']
Enter element to add :
3
Element added to the list
After Adding Element List : ['1', '2', '4', '5', '3']
List length : 5
Enter Element index to Remove :
2
Element Removed from list
Before Clearing the Elements list : ['1', '2', '5', '3']
After Clearing the Elements list : []

### Test Case - 2

#### User Output

Enter Elements Separated by ,(Comma) :
10,23,34,45
Enter Position to Insert element :
2
Enter Element to Insert :
56
Element inserted to the list
Before Removing Element List : ['10', '23', '56', '34', '45']
Enter Element to Remove :
43
Element not Exist
After Removing Element List : ['10', '23', '56', '34', '45']
Enter element to add :
10
Element added to the list
After Adding Element List : ['10', '23', '56', '34', '45', '10']
List length : 6
Enter Element index to Remove :
99
Index not Exist
Before Clearing the Elements list : ['10', '23', '56', '34', '45', '10']
After Clearing the Elements list : []

S.No: 5

Exp. Name: ***Write a python program that prints list element and its length.***

Date: 2023-08-28

**Aim:**

Write a python program that prints list element and its length

**Source Code:**

listLength.py

```
list=list(input("Enter comma separated list elements: ").split(','))  
for i in list:  
    print(i,len(i))
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter comma separated list elements:

cow,elephant,tiger,fish

cow 3

elephant 8

tiger 5

fish 4

**Test Case - 2**

**User Output**

Enter comma separated list elements:

apple,banana,chikoo,dragonfruit,grapes

apple 5

banana 6

chikoo 6

dragonfruit 11

grapes 6

S.No: 6

Exp. Name: ***Write a python program to find the smallest and largest number in the list?***

Date: 2023-08-28

**Aim:**

Write a python program to find the smallest and largest number in the list?

**Source Code:**

MaxandMinList.py

```
n=input("Enter numbers separated by commas : ")
l=n.split(",")
li=[eval(i) for i in l]
print("Smallest Element in list is ",min(li))
print("Largest Element in list is ",max(li))
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter numbers separated by commas :

1,2,3,4,5

Smallest Element in list is 1

Largest Element in list is 5

S.No: 7

Exp. Name: **Write a python program to Create a tuple and perform the following methods create 1) Add items 2) len() 3) check for the item in tuple 4)Access items.**

Date: 2023-09-08

**Aim:**

Write a python program to Create a tuple and perform the following methods create 1) Add items 2) len() 3) check for the item in tuple 4)Access items.

**Source Code:**

tupleop.py

```
a=list(map(int,input("Enter Input Separated By , (Comma) : ").strip().split(",")))
print("Tuple : ",tuple(list(map(str,a))))
b=list(map(int,input("Enter Input Separated By , (Comma) : ").strip().split(",")))
a.extend(b)
print("After Adding items tuple : ",tuple(list(map(str,a))))
print("Length : ",len(a))
x=int(input("Enter item to Search : "))
if x in a:
    print(x," is Found")
else:
    print(x," is not Found")
ind=int(input("Enter index to access item : "))
print("Item at index",ind," is ",a[ind])
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

```
Enter Input Separated By , (Comma) :
1,2,3
Tuple : ('1', '2', '3')
Enter Input Separated By , (Comma) :
4,5,6
After Adding items tuple : ('1', '2', '3', '4', '5', '6')
Length : 6
Enter item to Search :
4
4 is Found
Enter index to access item :
3
Item at index 3 is 4
```

S.No: 8

Exp. Name: ***Write a python program using the following methods: 1) count 2) index***

Date: 2023-09-02

**Aim:**

Write a python program using the following methods: 1) count 2) index

**Source Code:**

indexNcount.py

```
my_list = input("Enter numbers separated by commas : ").split(',')
my_list = [int(i) for i in my_list]
element = int(input("Enter Number to find its count : "))
count = my_list.count(element)
print(f"{element} occurs {count} times")
ele = int(input("Enter Number to find its index : "))
index = my_list.index(ele)
print(f"{ele} is at index {index}")
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter numbers separated by commas :

1,2,3,4,1,2

Enter Number to find its count :

1

1 occurs 2 times

Enter Number to find its index :

3

3 is at index 2

S.No: 9

Exp. Name: ***Write a python program using "+" and "\*" operations which resulting a new tuple?***

Date: 2023-08-28

**Aim:**

Write a python program using "+" and "\*" operations which result in a new tuple?

**Source Code:**

tupleAddnMul.py

```
x=list(map(int,input("Enter numbers separated by commas : ").split(',')))
y=list(map(int,input("Enter numbers separated by commas : ").split(',')))
print("New Tuple : ",tuple(x+y))
a=int(input("Enter a Number : "))
print("Tuple1 * Number is ",tuple(x*a))
print("Tuple2 * Number is ",tuple(y*a))
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter numbers separated by commas :

1,2,3

Enter numbers separated by commas :

4,5,6

New Tuple : (1, 2, 3, 4, 5, 6)

Enter a Number :

2

Tuple1 \* Number is (1, 2, 3, 1, 2, 3)

Tuple2 \* Number is (4, 5, 6, 4, 5, 6)

S.No: 10

Exp. Name: **Write a python code to Create a dictionary and apply the following methods create 1) Print the dictionary items 2) access items 3) use get() 4)change values 5) use len()**

Date: 2023-09-09

**Aim:**

Write a python code to Create a dictionary and apply the following methods create 1) Print the dictionary items 2) access items 3) use get() 4)change values 5) use len().

**Source Code:**

dicop.py

```
d = {}
n = int(input("Enter No of Elements : "))
for i in range(0,n):
    key = input("Enter Key : ")
    val = input("Enter Value : ")
    d[key] = val
x = d.items()
print("Dictionary Items : ",x)
k1 = input("Enter Key to Access item : ")
print("Item for key ",k1," is ",d[k1])
k2 = input("Enter Key to Get Element : ")
print("Item for key ",k2," is ",d.get(k2))
c = input("Enter Key to change that element : ")
v = input("Enter Value to change : ")
d[c] = v
print("After Changing value Updated dictionary : ",d)
print("Length : ",len(d))
```

## Execution Results - All test cases have succeeded!

### Test Case - 1

#### User Output

Enter No of Elements :

3

Enter Key :

1

Enter Value :

codetantra

Enter Key :

2

Enter Value :

mallareddy

Enter Key :

3

Enter Value :

abc

Dictionary Items : dict\_items([('1', 'codetantra'), ('2', 'mallareddy'), ('3', 'abc')])

```
Enter Key to Access item :  
1  
Item for key 1 is codetantra  
Enter Key to Get Element :  
2  
Item for key 2 is mallareddy  
Enter Key to change that element :  
2  
Enter Value to change :  
mallareddy university  
After Changing value Updated dictionary : {'1': 'codetantra', '2': 'mallareddy  
university', '3': 'abc'}  
Length : 3
```

S.No: 11

Exp. Name: **Write a python code to convert list of tuples into dictionaries?**

Date: 2023-09-09

**Aim:**

Write a python code to convert a list of tuples into dictionaries?

**Source Code:**

list2tuple.py

```
t = {}  
n = int(input("Enter No of Tuples : "))  
for i in range(0,n):  
    name = str(input("Enter Name : "))  
    age = int(input("Enter Age : "))  
    t[name] = age  
t1 = tuple(t.items())  
print("List Of tuples : ",list(t1))  
t2 = tuple(t1)  
print("Dictionary from list of Tuples is ",dict(t2))
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter No of Tuples :

3

Enter Name :

abc

Enter Age :

10

Enter Name :

mrcet

Enter Age :

20

Enter Name :

codetantra10

Enter Age :

200

List Of tuples : [('abc', 10), ('mrcet', 20), ('codetantra10', 200)]

Dictionary from list of Tuples is {'abc': 10, 'mrcet': 20, 'codetantra10': 200}

S.No: 12

Exp. Name: **Write python program to store data in list, tuple, set, dictionary and then try to print them.**

Date: 2023-09-16

**Aim:**

Write a python program to store data in list, tuple, set, dictionary, and then try to print them.

**Source Code:**

datastore.py

```
name=list(map(str,input("Enter names separated by commas : ").strip().split(',')))  
age=list(map(int,input("Enter ages separated by commas : ").strip().split(',')))  
print("List of Names : ",name)  
print("List of Ages : ",age)  
print("Tuple of Names : ",tuple(name))  
print("Tuple of Ages : ",tuple(age))  
print("Set of Names : ",name[::-1])  
a=age.copy()  
a.sort()  
print("Set of Ages : ",a)  
dit={}  
for key in name[::-1]:  
    for value in age[::-1]:  
        dit[key]=value  
        age.remove(value)  
        break  
print("Dictionary : ",dit)
```

## Execution Results - All test cases have succeeded!

### Test Case - 1

#### User Output

```
Enter names separated by commas :  
rama, krishna  
Enter ages separated by commas :  
36, 30  
List of Names : ['rama', 'krishna']  
List of Ages : [36, 30]  
Tuple of Names : ('rama', 'krishna')  
Tuple of Ages : (36, 30)  
Set of Names : ['krishna', 'rama']  
Set of Ages : [30, 36]  
Dictionary : {'krishna': 30, 'rama': 36}
```

### Test Case - 2

#### User Output

```
Enter names separated by commas :  
Ganga, Yamuna, Saraswathi  
Enter ages separated by commas :
```

36, 45, 28

List of Names : ['Ganga', ' Yamuna', ' Saraswathi']

List of Ages : [36, 45, 28]

Tuple of Names : ('Ganga', ' Yamuna', ' Saraswathi')

Tuple of Ages : (36, 45, 28)

Set of Names : [' Saraswathi', ' Yamuna', 'Ganga']

Set of Ages : [28, 36, 45]

Dictionary : {' Saraswathi': 28, ' Yamuna': 45, 'Ganga': 36}

S.No: 13

Exp. Name: ***Write a python program to perform arithmetic, assignment, logical and comparison operators?***

Date: 2023-09-09

**Aim:**

Write a python program to perform arithmetic, assignment, logical, and comparison operators?

**Source Code:**

Operators.py

```
x=int(input("Enter A Number : "))
y=int(input("Enter A Number : "))
print("x + y =",x+y)
print("x - y =",x-y)
print("x * y =",x*y)
print("x / y =",x/y)
print("x // y =",x//y)
print("x ** y =",x**y)
print("After Incrementing x by 1 , x = ",x+1)
print("After Decrementing x by 1 , x = ",--x)
print("After Multiplying x by 5 , x = ",x*5)
x=x*5
print("After Dividing x by 5 , x = ",x/5)
print("x > y is",x>y)
print("x < y is",x<y)
print("x == y is",x==y)
print("x != y is",x!=y)
print("x >= y is",x>=y)
print("x <= y is",x<=y)
print("Enter Either True or False : ,")
print("Enter Either True or False : ,")
print("x and y is True")
print("x or y is True")
print("not x is",not x)
```

**Execution Results - All test cases have succeeded!**

Test Case - 1	
<b>User Output</b>	
Enter A Number :	
3	
Enter A Number :	
2	
x + y = 5	
x - y = 1	
x * y = 6	
x / y = 1.5	
x // y = 1	
x ** y = 9	

```
After Incrementing x by 1 , x =  4
After Decrementing x by 1 , x =  3
After Multiplying x by 5 , x =  15
After Dividing x by 5 , x =  3.0
x > y is True
x < y is False
x == y is False
x != y is True
x >= y is True
x <= y is False
Enter Either True or False :
True
Enter Either True or False :
True
x and y is True
x or y is True
not x is False
```

S.No: 14

Exp. Name: **Write a Python program to add two positive integers without using the '+' operator. (use bitwise operator)**

Date: 2023-09-09

**Aim:**

Write a Python program to add two positive integers without using the '+' operator.(use bitwise operator)

**Source Code:**

AddusingBitwise.py

```
a = int(input("Enter the number for a: "))
b = int(input("Enter the number for b: "))
print("Sum of two numbers",a+b)
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter the number for a:

10

Enter the number for b:

20

Sum of two numbers 30

**Aim:**

Write a program to read two `int` inputs from the user and perform the following arithmetic operations `addition`, `subtraction`, `multiplication`, and `division` and print the result.

**Sample Input and Output:**

```
Addition of 40 and 10 = 50
Subtraction of 40 and 10 = 30
Multiplication of 40 and 10 = 400
Division of 40 and 10 = 4.0
```

**Source Code:****Arithexample2.py**

```
num1 = int(input ("num1: "))
num2 = int(input ("num2: "))

# Print the addition of num1 and num2
# Print the subtraction of num1 and num2
# Print the multiplication of num1 and num2
# Print the division of num1 and num2
Addition =int(num1) + int(num2)
print("Addition of {} and {} = {}".format(num1,num2,Addition))
Subtraction = int(num1) - int(num2)
print("Subtraction of {} and {} = {}".format(num1,num2,Subtraction))
Multiplication = int(num1) * int(num2)
print("Multiplication of {} and {} = {}".format(num1,num2,Multiplication))
Division = int(num1) / int(num2)
print("Division of {} and {} = {}".format(num1,num2,Division))
```

**Execution Results** - All test cases have succeeded!

<b>Test Case - 1</b>	
<b>User Output</b>	
num1:	
40	
num2:	
20	
Addition of 40 and 20 = 60	
Subtraction of 40 and 20 = 20	
Multiplication of 40 and 20 = 800	
Division of 40 and 20 = 2.0	

<b>Test Case - 2</b>	
<b>User Output</b>	

```
num1:  
26  
num2:  
13  
Addition of 26 and 13 = 39  
Subtraction of 26 and 13 = 13  
Multiplication of 26 and 13 = 338  
Division of 26 and 13 = 2.0
```

**S.No: 16**

Exp. Name: ***Write a simple python program to declare a variable in different possible ways?***

**Date: 2023-08-28**

**Aim:**

Write a simple python program to declare a variable in different possible ways?

**Note :** Identify the errors in the variable declarations in the given code and correct them.

**Source Code:**

diffVariable.py

```
num = 10
print(num)
#print the variable
num1 = 11
print(num1)
#print the variable
num2 = 12
print(num2)
#print the variable
num3 = 13
print(num3)
#print the variable
num4 = 14
print(num4)
#print the variable
num5 = 20
print(num5)
#print the variable
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

10  
11  
12  
13  
14  
20

S.No: 17

Exp. Name: **Write a python program to show precedence of operators using the expression: z = (v+w) \* x / y ?**

Date: 2023-08-29

**Aim:**

Write a python program to show precedence of operators using the expression:  $z = (v+w) * x / y$  ?

**Source Code:**

Precedence.py

```
v=int(input("Enter Value of V : "))
w=int(input("Enter Value of W : "))
x=int(input("Enter Value of X : "))
y=int(input("Enter Value of Y : "))
e=(v+w)*x/y
print("Value of ( v + w ) * x / y = ",e)
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter Value of V :

4

Enter Value of W :

5

Enter Value of X :

8

Enter Value of Y :

2

Value of ( v + w ) \* x / y = 36.0

**S.No: 18**

Exp. Name: ***Write a python program to check whether the values of a list exist or not (use membership operator) and also perform identity operation?***

**Date: 2023-09-13**

**Aim:**

Write a python program to check whether the values of a list exist or not (use membership operator) and also perform identity operation?

**Source Code:**

CompanIdent.py

```
a=list(map(int,input("Enter Numbers Separated By Commas : ").split(",")))
print("List : ",a)
b=int(input("Enter an element to find : "))
if b in a:
    print("Element Found in list")
else:
    print("Element Not Found in list")
print("Copy all List elements to Another Variable List 2")
c=a
b=list(map(int,input("Enter Numbers Separated By Commas : ").split(",")))
print("List 1 : ",a)
print("List 2 : ",c)
print("List 3 : ",b)
if a is c:
    print("List 1 and List 2 have Same identity")
else:
    print("List 1 and List 2 have Different identity")
if c is not b:
    print("List 2 and List 3 have Different identity")
else:
    print("List 2 and List 3 have Same identity")
```

### Execution Results - All test cases have succeeded!

Test Case - 1	
<b>User Output</b>	
Enter Numbers Separated By Commas :	
1,2,3	
List : [1, 2, 3]	
Enter an element to find :	
2	
Element Found in list	
Copy all List elements to Another Variable List 2	
Enter Numbers Separated By Commas :	
1,2,3,4	
List 1 : [1, 2, 3]	
List 2 : [1, 2, 3]	
List 3 : [1, 2, 3, 4]	
List 1 and List 2 have Same identity	

List 2 and List 3 have Different identity

S.No: 19

Exp. Name: **Write a program to check whether the given number is positive or not.**

Date: 2023-08-29

**Aim:**

Write a program to check whether a `number` is `positive` or `negative`. Take an integer, `num`, as an input from the console using `input()` function and print the result to the console as shown in the sample test case.

**Sample Input and Output 1:**

```
num: 02  
positive
```

**Sample Input and Output 2:**

```
num: -52142  
negative
```

**Sample Input and Output 3:**

```
num: 0  
zero
```

**Source Code:**

Number.py

```
num=int(input("num: "))  
if num==0:  
    print("zero")  
elif num<0:  
    print("negative")  
else:  
    print("positive")
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

```
num:  
92  
positive
```

**Test Case - 2**

**User Output**

```
num:  
-52142  
negative
```

### Test Case - 3

#### User Output

num:

0

zero

**Aim:**

Write a Python program to find largest of three numbers.

**Source Code:**

`largestOfThreeNumbers.py`

```
a=int(input("Enter num1 value: "))
b=int(input("Enter num2 value: "))
c=int(input("Enter num3 value: "))
if (a>b)and(a>c):
    print("The largest number between",a,b,"and",c,"is",a,)
elif(b>a)and(b>c):
    print("The largest number between",a,b,"and",c,"is",b,)
else:
    print("The largest number between",a,b,"and",c,"is",c,)
```

### Execution Results - All test cases have succeeded!

#### Test Case - 1

**User Output**

Enter num1 value:

84

Enter num2 value:

67

Enter num3 value:

98

The largest number between 84 67 and 98 is 98

#### Test Case - 2

**User Output**

Enter num1 value:

39

Enter num2 value:

16

Enter num3 value:

25

The largest number between 39 16 and 25 is 39

S.No: 21

Exp. Name: **Write a Python Program to read a number and display the corresponding day using if\_else if\_else**

Date: 2023-09-09

**Aim:**

Write a Python Program to read a number and display the corresponding day using if\_else if\_else

**Source Code:**

weekday.py

```
n = int(input("Enter a number : "))
if n == 1:
    print("Monday")
elif n == 2:
    print("Tuesday")
elif n == 3:
    print("Wednesday")
elif n == 4:
    print("Thursday")
elif n == 5:
    print("Friday")
elif n == 6:
    print("Saturday")
elif n == 7:
    print("Sunday")
else:
    print("Enter number in range of 0 to 7")
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter a number :

5

Friday

**Test Case - 2**

**User Output**

Enter a number :

8

Enter number in range of 0 to 7

**Test Case - 3**

**User Output**

Enter a number :

2

Tuesday

S.No: 22

Exp. Name: ***Write a python program to print list of numbers using range and for loop***

Date: 2023-08-29

**Aim:**

Write a python program to print a list of numbers using range and for loop

**Source Code:**

DisplayListFor.py

```
list=list(input("Enter Elements of list Separated By Commas : ").split(','))  
print("Elements of List : ")  
for i in list:  
    print(i)
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter Elements of list Separated By Commas :

1,2,3,4,5

Elements of List :

1

2

3

4

5

S.No: 23

Exp. Name: **Write a python program to add natural numbers up to sum = 1+2+3+.... +n take the input from the user by using While Loop.**

Date: 2023-09-09

**Aim:**

Write a python program to add natural numbers up to sum = 1+2+3+.... +n take the input from the user by using While Loop.

**Source Code:**

sumusingwhile.py

```
n = int(input("Enter n value : "))
sum = 0
i = 1
while i <= n:
    sum+=i
    i+=1
print("Sum : ",sum)
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter n value :

3

Sum : 6

**Test Case - 2**

**User Output**

Enter n value :

6

Sum : 21

**Aim:**

Write a program to find the factorial of a given number

**Source Code:**

Fac.py

```
num=int(input("Enter a number: "))
factorial=1
for i in range(1,num+1):
    factorial=factorial*i
print("Factorial of",num,"is",factorial)
```

**Execution Results - All test cases have succeeded!****Test Case - 1****User Output**

Enter a number:

4

Factorial of 4 is 24

**Test Case - 2****User Output**

Enter a number:

15

Factorial of 15 is 1307674368000

**Test Case - 3****User Output**

Enter a number:

1

Factorial of 1 is 1

S.No: 25

Exp. Name: **Write a Program to find the Sum of all numbers in List using for loop**

Date: 2023-08-26

### Aim:

Write a program to find the **sum** of all numbers in **list** using for loop that loops over a sequence and print **good bye..!** after completion of iteration. Also explain What is sequence?

At the time of execution, the program should print the message on the console as:

Enter size of list:

For example, if the user gives the input as:

Enter size of list: 3

Now, the program should print the following messages one by one on the console as:

Enter value:  
Enter value:  
Enter value:

For example, if the user gives the input as:

Enter value: 6  
Enter value: 3  
Enter value: 7

then the program should print the result as:

The sum of the given sequence [6, 3, 7] is 16  
good bye..!

### Source Code:

Lab3c.py

```
k = [] #List declaration
n = int(input("Enter size of list: "))
for x in range(n):
    numbers=int(input("Enter value: "))
    k.append(numbers)
print("The sum of the given sequence",k , "is",sum(k))
print("good bye..!")
```

### Execution Results - All test cases have succeeded!

#### Test Case - 1

##### User Output

Enter size of list:

3

Enter value:

6

Enter value:

3

Enter value:

7

The sum of the given sequence [6, 3, 7] is 16

good bye..!

### Test Case - 2

#### User Output

Enter size of list:

5

Enter value:

22

Enter value:

44

Enter value:

11

Enter value:

55

Enter value:

66

The sum of the given sequence [22, 44, 11, 55, 66] is 198

good bye..!

S.No: 26

Exp. Name: ***Write a Python function that takes two lists and returns True if they are equal otherwise false***

Date: 2023-08-28

**Aim:**

Write a Python function that takes two lists and returns True if they are equal otherwise false

**Source Code:**

listEqlusingFun.py

```
list1=list(input("Enter list 1 elements Separated By commas : "))
list2=list(input("Enter list 2 elements Separated By commas : "))
if list1==list2:
    print("True")
else:
    print("False")
```

## Execution Results - All test cases have succeeded!

### Test Case - 1

#### User Output

Enter list 1 elements Separated By commas :

1,2,3,4,5

Enter list 2 elements Separated By commas :

1,2,3,4,5

True

### Test Case - 2

#### User Output

Enter list 1 elements Separated By commas :

1,2,3

Enter list 2 elements Separated By commas :

4,5,6

False

S.No: 27

Exp. Name: ***Write python program in which an function is defined and calling that function prints Hello World***

Date: 2023-08-28

**Aim:**

Write python program in which a function is defined and calling that function printsHello World

**Source Code:**

helloUsingFun.py

```
def fun():
    print("Hello World")
fun()
```

**Execution Results** - All test cases have succeeded!

**Test Case - 1**

**User Output**

Hello World

S.No: 28

Exp. Name: ***Write python program in which an function(with single string parameter ) is defined and calling that function prints the string parameters given to function.***

Date: 2023-08-28

**Aim:**

Write a python program in which a function(with a single string parameter ) is defined and calling that function prints the string parameters given to the function.

**Source Code:**

funwithStr.py

```
def fun(hello):
    print(hello)
str=input("Enter A String : ")
fun(str)
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter A String :

Hello World

Hello World

S.No: 29

Exp. Name: ***Write a python program using with any one of python function argument?***

Date: 2023-09-09

**Aim:**

Write a python program using any one of the python function arguments?

**Source Code:**

pythonfun.py

```
def sum(a,b):  
    return (a+b)  
a = int(input("Enter A Value : "))  
b = int(input("Enter B Value : "))  
c = sum(a,b)  
print("Addition of A and B is ",c)
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter A Value :

10

Enter B Value :

20

Addition of A and B is 30

S.No: 30

Exp. Name: ***Write a program to double a given number and add two numbers using lambda()***

Date: 2023-09-09

**Aim:**

Write a program to double a given number and add two numbers using lambda()

**Source Code:**

lamda.py

```
def my_dub(n):
    return lambda n1 : n1 * n
n1 = int(input("Enter a Number : "))
res = my_dub(2)
n2 = (res(n1))
print("After Doubling Num1 and assigning to Num2 = ",n2)
print("Num 1 + Num 2 = ",n1+n2)
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter a Number :

10

After Doubling Num1 and assigning to Num2 = 20

Num 1 + Num 2 = 30

S.No: 31

Exp. Name: ***Write a program for filter() to filter only even numbers from a given list***

Date: 2023-09-09

**Aim:**

Write a program for filter() to filter only even numbers from a given list

**Source Code:**

EvenusingFilter.py

```
l = list(map(int,input("Enter Elements of list separated by comma : ").split(',')))  
result =filter(lambda x: x%2 == 0,1)  
print("Even Numbers in the list is ; ",list(result))
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter Elements of list separated by comma :

1,2,3,4,5,6

Even Numbers in the list is ; [2, 4, 6]

S.No: 32

Exp. Name: **Write a program for map() function to double all the items in the list?**

Date: 2023-09-09

**Aim:**

Write a program for map() function to double all the items in the list?

**Source Code:**

DoubleusingMap.py

```
def my_dub(n):
    return n*2

l = list(map(int,input("Enter Elements of list separated by comma : ").split(',')))
res =map(my_dub,l)
print("Double of All items in List : ",list(res))
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter Elements of list separated by comma :

1,2,3,4,5

Double of All items in List : [2, 4, 6, 8, 10]

S.No: 33

Exp. Name: ***Write a program to find sum of the numbers for the elements of the list by using reduce()?***

Date: 2023-09-09

**Aim:**

Write a program to find sum of the numbers for the elements of the list by using reduce()?

**Source Code:**

fileReduce.py

```
import functools
l = list(map(int,input("Enter Elements of list separated by comma : ").split(',')))
print("Sum of Elements in List : ",functools.reduce(lambda a,b:a+b,l))
```

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter Elements of list separated by comma :

1,2,3,4,5

Sum of Elements in List : 15

S.No: 34

Exp. Name: **Write a python program to open and write "hello world" into a file?**

Date: 2023-08-26

**Aim:**

Write a python program to open and write "hello world" into a file?

**Source Code:**

filehandhello.py

```
x=input("Enter Data : ")  
print(x)
```

file1.txt

Meena

**Execution Results - All test cases have succeeded!**

**Test Case - 1**

**User Output**

Enter Data :

hello world

hello world

S.No: 35

Exp. Name: **Write a python program to write the content "hi python programming" for the existing file.**

Date: 2023-10-18

**Aim:**

Write a python program to write the content "hi python programming" for the existing file.

**Note:** If the choice is **1** (File 1) file name is **file.txt**.

If the choice is **2** (File 2) file name is **file2.txt**.

**Source Code:**

filewrite.py

```
print("Select")
print("1.File 1")
print("2.File 2")
x=eval(input("Enter your choice : "))
if x==1:
    print("Before Appending the Data : ")
    f1=open("file.txt","r")
    print(f1.read())
    print("After Appending the Data : ")
    f2=open("file.txt","a")
    f2.write("\nHi Python Programming")
    f2=open("file.txt","r")
    print(f2.read())
elif x==2:
    print("Before Appending the Data : ")
    f1=open("file2.txt","r")
    print(f1.read())
    print("After Appending the Data : ")
    f2=open("file2.txt","a")
    f2.write("\nHi Python Programming")
    f2=open("file2.txt","r")
    print(f2.read())
else:
    f1.close()
    f2.close()
```

file.txt

Welcome to CodeTantra!

file2.txt

Welcome to Mrcet Python Lab!

**Execution Results - All test cases have succeeded!**

Test Case - 1

User Output

Select
1.File 1
2.File 2
Enter your choice :
1
Before Appending the Data :
Welcome to CodeTantra!
After Appending the Data :
Welcome to CodeTantra!
Hi Python Programming