

GANPAT UNIVERSITY
U. V. PATEL COLLEGE OF ENGINEERING
B.Tech CE/IT Semester IV
2CEIT404: Python Programming

PRACTICAL-6: FUNCTION(UDF)

1. Write a program to perform addition of two numbers using user defined function.

INPUT:

```
print(21012011074)
def Add(a,b):
    print("Addition of ",a,"+",b,"=",a+b)
a,b=int(input("enter the numbers: ")),int(input("enter the numbers: "))
Add(a,b)
```

OUTPUT:

```
21012011074
enter the numbers: 15
enter the numbers: 11
Addition of  15 + 11 = 26
```

2. Write a program to display all the prime numbers between 1 to n using function.

INPUT:

```
print(21012011074)
def prime_no(x):
    for i in range(1,x+1):
        flag=0
        for j in range(2,i):
            if i%j==0:
                flag=1
                break
        if flag==0:
            li.append(i)
li=[]
u=int(input("Enter the upper limit: "))
prime_no(u)
print(li)
```

OUTPUT:

```
21012011074
Enter the upper limit: 100
[1, 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71,
73, 79, 83, 89, 97]
```

3. Write a user defined function to sort a List.

INPUT:

```
print(21012011074)
st=[]
n=int(input("Enter the limit of list:"))
for x in range(n):
    y=int(input("Enter the number:"))
    st.append(y)

# print(st)
def sort(li):
    for i in range(0,len(li)-1):
        for j in range(len(li)-1):
            if li[j]>li[j+1]:
                temp=li[j]
                li[j]=li[j+1]
                li[j+1]=temp
    return li

b=sort(st)
print(b)
```

OUTPUT:

```
21012011074
Enter the limit of list:5
Enter the number:11
Enter the number:10
Enter the number:52
Enter the number:92
Enter the number:19
[10, 11, 19, 52, 92]
```

4. Write a function to find the minimum and maximum value from argument list & return both minimum & maximum in tuple form.

INPUT:

```
print(21012011074)
st=[1,88,191,99,91,44,65,447,100]
tup=()
tup=list(tup)
def maximum(maxx):
    max_no=st[0]
    for i in maxx:
        if i>max_no:
            max_no=i
    tup.append(max_no)

def minimum(minn):
    min_no=minn[0]
    for i in minn:
        if i<min_no:
            min_no=i
    tup.append(min_no)

maximum(st)
minimum(st)
tup=tuple(tup)
print(tup)
```

OUTSIDE:

```
21012011074
(447, 1)
```

5. Write a function to add two lists of the same length term-by-term & return new list

Eg.: A=listAdd([1,2,3],[1,2,3])

print (A) Will print [2,4,6].

INPUT:

```
print(21012011074)
li1=[1,2,3]
li2=[4,5,6]
li3=[]
def add_list(li1,li2):
    for i in range(len(li1)):
        for j in range(len(li2)):
            if i==j:
                x=li1[i]+li2[i]
                li3.append(x)
add_list(li1,li2)
print(li3)
```

OUTPUT:

```
21012011074
[5, 7, 9]
```

6. WAP a function called powers(n) that prints out the first 5 powers of a given number.

Eg. >>> powers(6)

The first 5 powers of 6 are: 1 6 36 216 1296

INPUT:

```
print(21012011074)
def power(n):
    for i in range(5):
        print(n**i,end=" ")
x=int(input("Enter the number"))
power(x)
```

OUTPUT:

```
21012011074
Enter the number6
1 6 36 216 1296
```