Roll No : 7824

Assignment No : 1

Assignment Name : Write a Python program to display Name and Address Of Student

---

Program:

```
a = str(input("Enter First Name:"))


b = str(input("Enter Last  Name:"))


c = str(input("Enter Your  Address:"))


print("Your Name is:{0} {1}".format(a,b))


print("Your Address is :"+c)
```

Output:

```
runfile ('C:/Users/DELL/3D
Objects/python/Assignment/Assi_1.py', wdir='C:/Users/DELL/3D
Objects/python/Assignment')

Enter First Name: Rushi

Enter Last Name: Kore

Enter Your Address: Shirdhon,416121.

Your Name is: Rushi Kore

Your Address is: Shirdhon,416121.
```

Roll No : 7824

Assignment No : 2

Assignment Name : Write a Python program to accept two numbers and perform basic Arithmetic operation on these no.

Program:

```
a = float(input("Enter First No:"))
b = float(input("Enter Last  No:"))
c= a+b
d= a-b
e= a*b
f= a/b
g= a//b
h= a%b

print("Addition of {0} and {1} is :{2}".format(a,b,c))
print("Subtraction of {0} and {1} is :{2}".format(a,b,d))
print("Multiplication of {0} and {1} is :{2}".format(a,b,e))
print("Division(float) of {0} and {1} is:{2}".format(a,b,f))
print("Division(floor) of {0} and {1} is:{2}".format(a,b,g))
print("Modulus of {0} and {1} is :{2}".format(a,b,h))
```

Output:

```
runfile('C:/Users/DELL/3D
Objects/python/Assignment/Assi_2.py', wdir='C:/Users/DELL/3D
Objects/python/Assignment')

Enter First No:10

Enter Last  No:20

Addition of 10.0 and 20.0 is :30.0

Subtraction of 10.0 and 20.0 is :-10.0

Multiplication of 10.0 and 20.0 is :200.0

Division(float) of 10.0 and 20.0 is :0.5

Division(floor) of 10.0 and 20.0 is :0.0

Modulus of 10.0 and 20.0 is :10.0
```

Roll No : 7824

Assignment No : 3

Assignment Name : Write a menu driven program in python to Convert temperature

---

Program:

```
print("for Fahrenheit to Celsius press:1")
print("for Celsius to Fahrenheit press:2")
print("for exit press:3")

def rk1(num):
    if(num ==1):
        d=float(input("Enter Fahrenheit value"))
        c=((d-32)*5)/9
        print("Celsius value is:",c)
    elif(num ==2):
        d=float(input("Enter Celsius value"))
        c= (d*1.8)+32
        print("Fahrenheit value is :",c)

no = int(input("Choose Operation:"))
rk1(no)
```

Output:

```
runfile('C:/Users/DELL/3D Objects/python/Assignment/Assi_3.py',
wdir='C:/Users/DELL/3D Objects/python/Assignment')

for Fahrenheit to Celsius press:1

for Celsius to Fahrenheit press:2

for exit press:3


Choose Opertion:1

Enter Fahrenheit value 25

Celsius value is: -3.888888888888889


Choose Opertion:2

Enter Celsius value 41

Fahrenheit value is: 105.8


Choose Opertion:3
```

Roll No : 7824

Assignment No : 4

Assignment Name : Write a Python program to calculate Factorial of given no.

Program:

```
def fact(n):
    if (n==1 )or (n==0):
        return 1
    else:
        s=n * fact(n - 1)
        return s


num = float(input("Enter a No:"))
fact(num)
print("Factorial of",num,"is",fact(num))
```

Output:

```
runfile('C:/Users/DELL/3D Objects/python/Assignment/Assi_4.py',
wdir='C:/Users/DELL/3D Objects/python/Assignment')
Enter a No:5
Factorial of 5.0 is 120.0
```

Roll No	: 7824
Assignment No	: 5
Assignment Name	: Write a program to create a list of n numbers and separate those no in two different lists (even and odd) using user defined function

Program:

```
def even(list):
    print ("Original list is:”, list)
    l1= []
    l2= []
    for i in list:
        if (i%2 == 0):
            l1. append(i)
        else:
            l2. append(i)
    print ("list of even:”, l1)
    print ("list of odd:”, l2)
list = []
n = int (input ("Enter number of elements: "))
for i in range (0, n):
    element = int (input ())
    list.append(element)
even(list)
```

Output:

```
runfile('C:/Users/DELL/3D
Objects/python/Assignment/Assi_5.py', wdir='C:/Users/DELL/3D
Objects/python/Assignment')

Enter number of elements: 5

10

15

20

25

30

Original list is: [10, 15, 20, 25, 30]

list of even: [10, 20, 30]

list of odd: [15, 25]
```

Roll No : 7824

Assignment No : 6

Assignment Name : Write a program to display maximum number and minimum number from given list

---

Program:

```
#maximum
def maximum_check(x):
  max_v = x [0]
  for i in x:
    if i > max_v:
      max_v = i
  return max_v

# minimum number
def minimum_check(x):
  min_v = x[0]
  for i in x:
    if i < min_v:
      min_v = i
  return min_v

list = [ ]
n = int (input ("Enter number of elements: "))
for i in range (0, n):
```

```
    element = int(input ())
    list.append(element)
maximum_check(list)
minimum_check(list)
print("Maximum of the list", maximum_check(list))
print("Minimum of the list", minimum_check(list))
```

Output:

```
runfile('C:/Users/DELL/3D
Objects/python/Assignment/Assi_6.py', wdir='C:/Users/DELL/3D
Objects/python/Assignment')
Enter number of elements: 4
10
20
30
40
Maximum of the list 40
Minimum of the list 10
```

Roll No : 7824

Assignment No : 7

Assignment Name : Write a Python program to demonstrate Slicing

---

Program:

```
print("slicing for list")
list = [ ]
n = int (input ("Enter size of List : "))
print("Enter Element of List:")
for i in range (0, n):
    element = int(input ())
    list.append(element)
print("originl list is:",list)
m = int(input("Enter slicing Start value:"))
n = int(input("Enter slicing Stop value:"))
k = int(input("Enter slicing Step value:"))
print("slicing from {} to {} with step {}:".format(m,n,k))
print(list[m:n:k])
```

```
print("slicing for tuple")
tuple=tuple(list)
print("Original tuple is:",tuple)
m = int(input("Enter slicing Start value:"))
n = int(input("Enter slicing Stop value:"))
k = int(input("Enter slicing Step value:"))
```

```
print("slicing from {} to {} with step {}:".format(m,n,k))
print(tuple[m:n:k])


kk =str(input("Enter a String value"))
print("Original String is:",kk)
m = int(input("Enter slicing Start value:"))
n = int(input("Enter slicing Stop value:"))
k = int(input("Enter slicing Step value:"))
print("slicing from {} to {} with step {}:".format(m,n,k))
print(kk[m:n:k])
```

Output:

```
runfile('C:/Users/DELL/3D
Objects/rk_1/python/Assignment/Assi_7.py',
wdir='C:/Users/DELL/3D Objects/rk_1/python/Assignment')
slicing for list
Enter size of List : 5
Enter Element of List:
1
2
3
4
5
originl list is: [1, 2, 3, 4, 5]
Enter slicing Start value:1
Enter slicing Stop value:5
Enter slicing Step value:2
```

```
slicing from 1 to 5 with step 2:
[2, 4]

slicing for tuple
Original tuple is: (1, 2, 3, 4, 5)
Enter slicing Start value:1
Enter slicing Stop value:5
Enter slicing Step value:2
slicing from 1 to 5 with step 2:
(2, 4)

Enter a String value: ram
Original String is:  ram
Enter slicing Start value:1
Enter slicing Stop value:2
Enter slicing Step value:1
slicing from 1 to 2 with step 1:
r
```

Roll No : 7824

Assignment No : 8

Assignment Name : Write a Python program to demonstrate Set operation.

Program:

```
print("First set")
my_set1 = set()
n = int (input ("Enter size of Set : "))
print("Enter {0} Element of Set :".format(n))
for i in range(0,n):
    e = int(input())
    # Adding num to my_set
    my_set1.add(e)
print(my_set1)

print("Second set")
my_set = set()
n = int (input ("Enter size of Set : "))
print("Enter {0} Element of Set :".format(n))
for i in range(0,n):
    e = int(input())

# Adding num to my_set
    my_set.add(e)
```

```
print(my_set)


print("For Union of set press:1")
print("For Intersection of set press:2")
print("For Difference of set press:3")
print("For Symmetric Difference of set press:4")
print("For Exit press:5 ")


no = int(input("Choose Opertion:"))
while(no):
    if(no == 1):
      print("Union of set1 and set 2 is:")
      print(my_set1.union(my_set))
      no = int(input("Choose Opertion:"))
    elif(no == 2):
      print(" Intersection of set1 and set 2 is:")
      print(my_set1.intersection(my_set))
      no = int(input("Choose Opertion:"))
    elif(no == 3):
      print("Difference of set1 and set 2 is:")
      print(my_set1-my_set)
      no = int(input("Choose Opertion:"))
    elif(no == 4):
      print("Symmetric Difference of set1 and set 2 is:")
      c =my_set1^my_set
```

```
      print(c)
      no = int(input("Choose Opertion:"))
    else:
      StopIteration
```

Output

```
runfile('C:/Users/DELL/3D
Objects/rk_1/python/Assignment/Assi_8.py',
wdir='C:/Users/DELL/3D Objects/rk_1/python/Assignment')
First set
Enter size of Set : 5
Enter 5 Element of Set :
10
20
30
40
50
{40, 10, 50, 20, 30}
Second set
Enter size of Set : 5
Enter 5 Element of Set :
25
30
40
```

```
10
20
{40, 10, 20, 25, 30}
For Union of set press:1
For Intersection of set press:2
For Difference of set press:3
For Symmetric Difference of set press:4
For Exit press:5
Choose Opertion:1
Union of set1 and set 2 is:
{40, 10, 50, 20, 25, 30}
Choose Opertion:2
 Intersection of set1 and set 2 is:
{40, 10, 20, 30}
Choose Opertion:3
Difference of set1 and set 2 is:
{50}
Choose Opertion:4
Symmetric Difference of set1 and set 2 is:
{50, 25}
Choose Opertion:5
```

Roll No : 7824

Assignment No : 9

Assignment Name : Write a Python program to print current date and time.

Program:

```
from datetime import datetime as r

# Getting current date and time
now = r.now()

s=now.strftime("%d %b %Y")
print("Today Date is:",s)

p=now.strftime("%H:%M:%S")
print("Current Time is:",p)
```

Output:

```
runfile('C:/Users/DELL/3D
Objects/rk_1/python/Assi_9_13/Assi_9.py',
wdir='C:/Users/DELL/3D Objects/rk_1/python/Assi_9_13')

Today Date is: 22 Dec 2022

Current Time is: 14:04:08
```

Roll No : 7824

Assignment No : 10

Assignment Name : Write a Python program to print Today’s Year, Month, and Date

---

Program:

```
from datetime import date


today = date.today()
print("Current Year:", today.year)


s=today.strftime("%b")
print("Current Month:", s)


print("Current Day:", today.day)
```

Output:

```
runfile('C:/Users/DELL/3D
Objects/rk_1/python/Assi_9_13/Assi_10.py',
wdir='C:/Users/DELL/3D Objects/rk_1/python/Assi_9_13')
Current Year: 2022
Current Month: Dec
Current Day: 22
```

Roll No : 7824

Assignment No : 11

Assignment Name : Write a Python program to convert Date to String

---

Program:

```
from datetime import date

today = date.today()

# Converting the date to the string

Str = date.isoformat(today)
print("Date to String:", Str)
print(type(Str))
```

Output:

```
runfile('C:/Users/DELL/3D
Objects/rk_1/python/Assi_9_13/untitled2.py',
wdir='C:/Users/DELL/3D Objects/rk_1/python/Assi_9_13')
Date to String: 2022-12-22
<class 'str'>
```

Roll No : 7824

Assignment No : 12

Assignment Name : Write a Python program to display the Calendar of a given month.

Program:

```
import calendar

yy = int(input("Enter a year:"))

mm = int(input("Enter a Month:"))

print(calendar.month(yy, mm))
```

Output:

```
runfile('C:/Users/DELL/3D
Objects/rk_1/python/Assi_9_13/Assi_12.py',
wdir='C:/Users/DELL/3D Objects/rk_1/python/Assi_9_13')

Enter a year:2019

Enter a Month:12

  December 2019

Mo Tu We Th Fr Sa Su

                   1

 2  3  4  5  6  7  8

 9 10 11 12 13 14 15

16 17 18 19 20 21 22

23 24 25 26 27 28 29

30 31
```

Roll No : 7824

Assignment No : 13

Assignment Name : Write a Python program to display calendar of the given year.

Program:

```
import calendar

yy=int(input("Enter a year:"))

print ("The calendar of year {} is :".format(yy))

print (calendar.calendar(yy, 2, 1, 6))
```

Output:

```
runfile('C:/Users/DELL/3D
Objects/rk_1/python/Assi_9_13/Assi_13.py',
wdir='C:/Users/DELL/3D Objects/rk_1/python/Assi_9_13')

Enter Year:2022
```

```
                                  2022

      January                   February                  March
Mo Tu We Th Fr Sa Su      Mo Tu We Th Fr Sa Su      Mo Tu We Th Fr Sa Su
                1  2          1  2  3  4  5  6          1  2  3  4  5  6
 3  4  5  6  7  8  9       7  8  9 10 11 12 13       7  8  9 10 11 12 13
10 11 12 13 14 15 16      14 15 16 17 18 19 20      14 15 16 17 18 19 20
17 18 19 20 21 22 23      21 22 23 24 25 26 27      21 22 23 24 25 26 27
24 25 26 27 28 29 30      28                        28 29 30 31
```

April

Mo	Tu	We	Th	Fr	Sa	Su
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

May

Mo	Tu	We	Th	Fr	Sa	Su
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

June

Mo	Tu	We	Th	Fr	Sa	Su
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

July

Mo	Tu	We	Th	Fr	Sa	Su
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August

Mo	Tu	We	Th	Fr	Sa	Su
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

September

Mo	Tu	We	Th	Fr	Sa	Su
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

October

Mo	Tu	We	Th	Fr	Sa	Su
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

November

Mo	Tu	We	Th	Fr	Sa	Su
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

December

Mo	Tu	We	Th	Fr	Sa	Su
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Roll No : 7824

Assignment No : 14

Assignment Name : Write a Python program to demonstrate file Input and Output

---

Program:

```
rk= open("rk.txt","w")

if rk:

     print("File Created and Opened Sucessfully in write
mode :")

rk.write("7824 \n RUSHIKESH KORE  \n BCA-3")

if rk.write:

    print("Data Inserted With Write Mode..!")

rk.close()

print("")



rk = open("rk.txt","r")

if rk:

    print("File Opened In Read Mode :")

print("Result after Write  :\n",rk.read())

rk.close()

print("")


rk= open("rk.txt", "a+")

if rk:

    print("file opened In append mode :")
```

```
rk.write("\n NIMCET \n CET \n ITS \n DM \n DMDW \n JAVA \n
Swyam \n Python")

if rk.write:

    print("Data Inserted With Append Mode...")


rk.close()

print("")


rk = open("rk.txt","r")

if rk:

    print("File Opened In Read Mode :")

print("Result after Append  :\n",rk.read())

rk.close()

print("")


rk = open("rk.txt" ,"w+")

if rk:

    print("File Is overwrite Sucsessfully with Write+
mode..!")

rk.write("Data OverWrited..!")

rk.close()


print("")
```

```
rk=open("rk.txt")
if rk:
    print("File Opened In Default Mode (r):")
print("Result after Overwrite :\n",rk.read())
rk.close()
```

Output:

```
runfile('C:/Users/DELL/untitled0.py', wdir='C:/Users/DELL')
File Created and Opened Sucessfully in write mode :
Data Inserted With Write Mode..!

File Opened In Read Mode :
Result after Write  :
 7824
 RUSHIKESH KORE
 BCA-3

file opened In append mode :
Data Inserted With Append Mode...

File Opened In Read Mode :
Result after Append  :
 7824
 RUSHIKESH KORE
 BCA-3
```

```
 NIMCET
 CET
 ITS
 DM
 DMDW
 JAVA
 Swyam
 Python

File Is overwrite Sucsessfully with Write+ mode..!

File Opened In Default Mode (r):
Result after Overwrite :
 Data OverWrited..!
```

Roll No : 7824

Assignment No : 15

Assignment Name : Write a Python Program to add two numbers using GUI.

Program:

```
from tkinter import *

root = Tk()
root.geometry("500x500")

Label(root, text="Enter first number:").grid(row=0,
column=5)
Label(root, text="Enter second number:").grid(row=1,
column=5)

label3 = Label(root)

label3.grid(row=3, column=6)



no1     = IntVar()
no2     = IntVar()

entry1 = Entry(root, textvariable=no1).grid(row=0, column=6)
entry2 = Entry(root, textvariable=no2).grid(row=1, column=6)
```

```
def add():
    Add = no1.get() + no2.get()
    label3.config(text="Addition of number is:" + str(Add))


b1 = Button(root, text=("Submit"), command=add).grid(row=2,
column=6)


root.mainloop()
```

Output:

```
runfile('C:/Users/RK/3D
Objects/python/Assignment/Assi_15.py', wdir='C:/Users/RK/3D
Objects/python/Assignment')
```