Python

ASSIGNMENT 3

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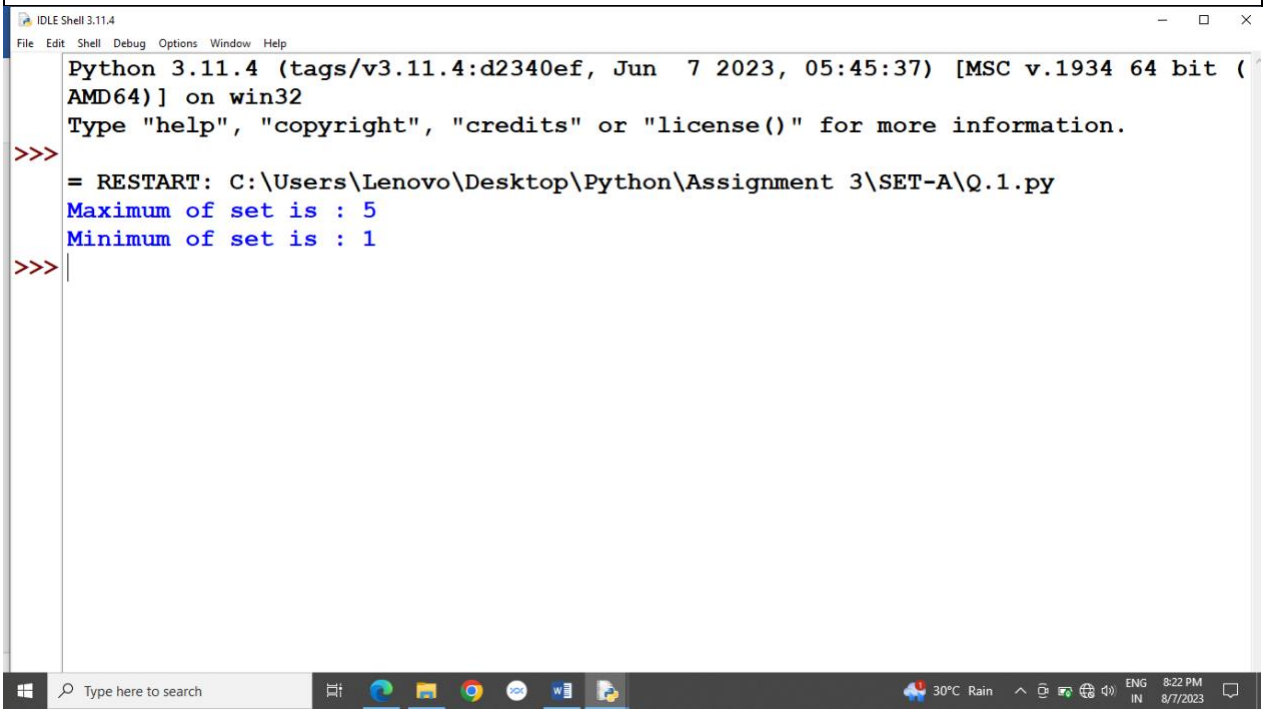
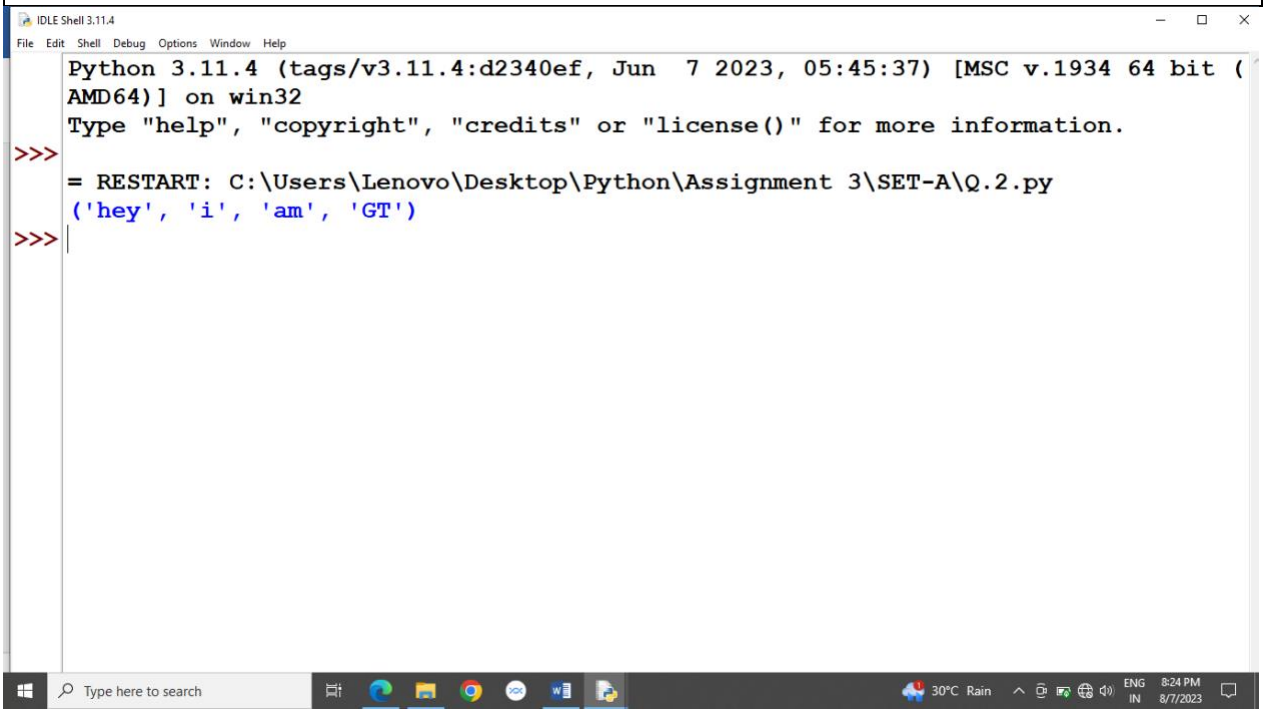
ROLL NO:
CLASS: TYBBACA
GUIDE: PROF.LANDE R.D
ASSIGNMENT BASED ON: WORKING WITH TUPLE, SETS AND DICTIONARIES

ASSIGNMENT 3
SET-A
Q.1 Write a Python program to find maximum and the minimum value in a set.
Ans: s={1,2,3,4,5} print("Maximum of set is :",max(s)) print("Minimum of set is :",min(s))
Output:



ASSIGNMENT 3
SET-A
Q.2 Write a Python program to add an item in a tuple.
Ans: t1=("hey","i","am") t2=("GT",) t3=t1+t2 print(t3)
Output:



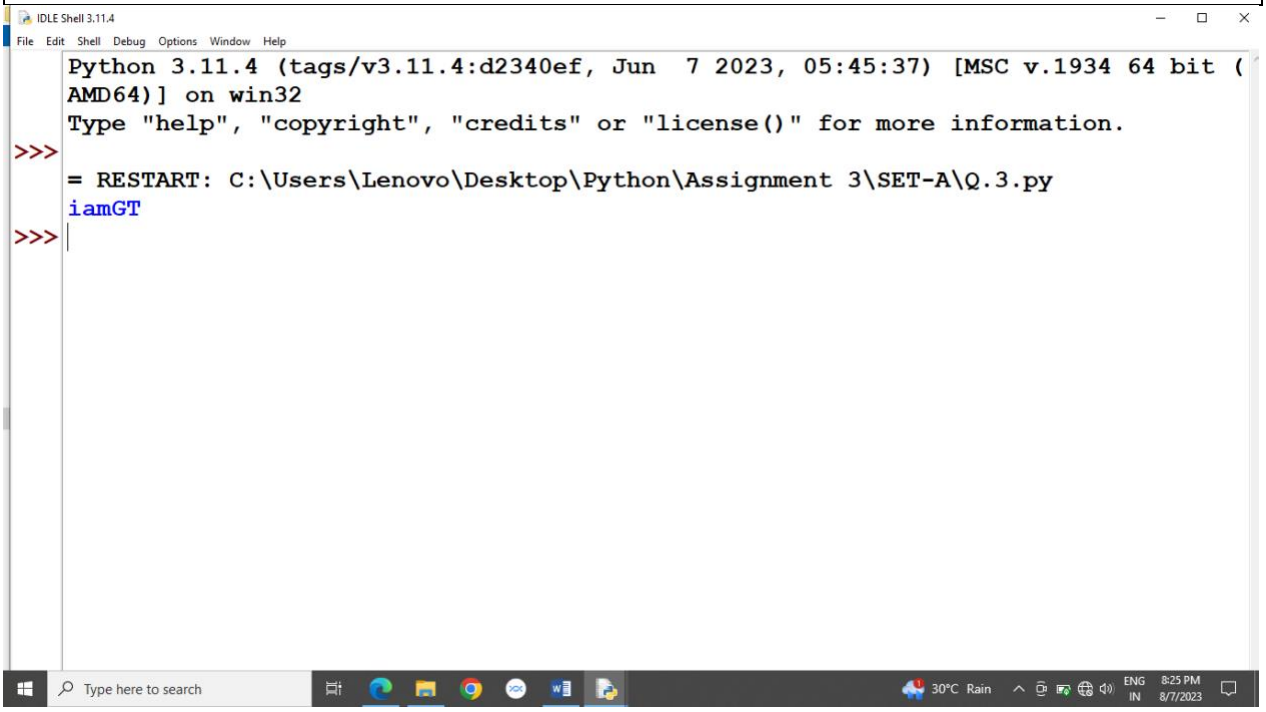
ASSIGNMENT 3
SET-A
Q.3 Write a Python program to convert a tuple to a string

Ans:

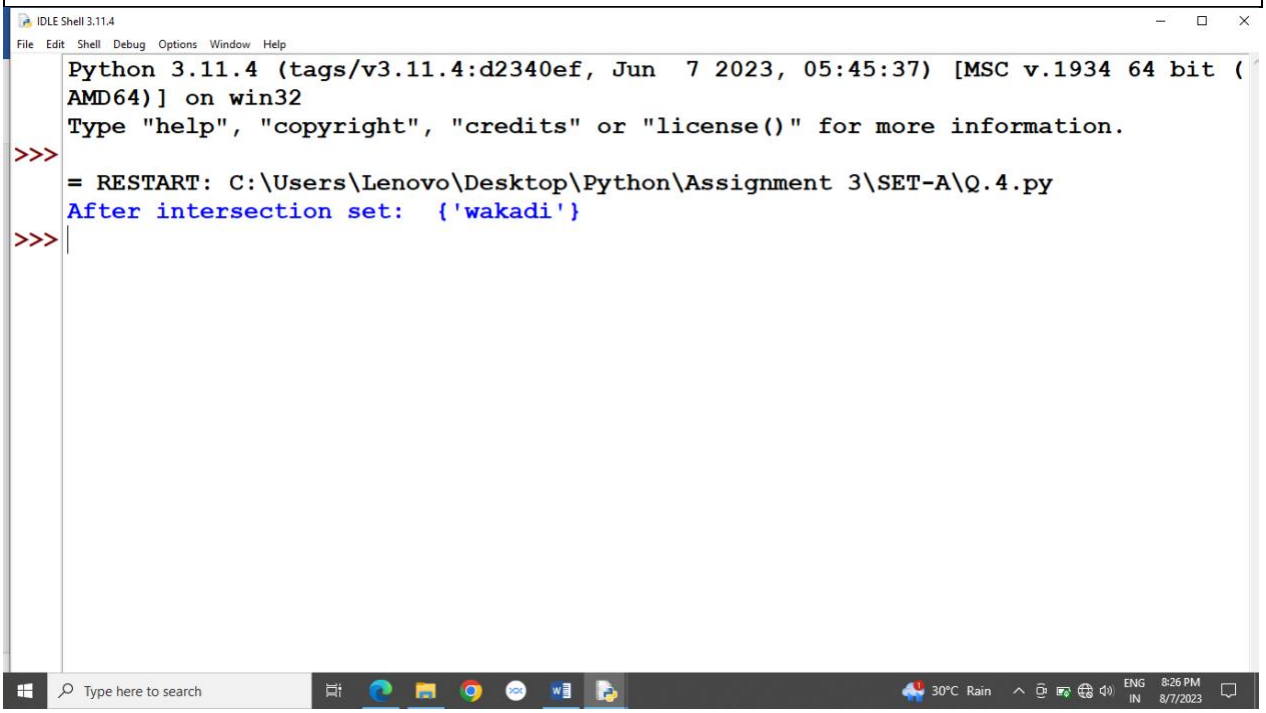
```
def tupletostring(tuple):
        str=''
        for value in tuple:
                str=str+value
        return str

str=('i','am','GT')
print(tupletostring(str))
```

Output:



ASSIGNMENT 3
SET-A
Q.4 Write a Python program to create an intersection of sets.
Ans: s1={"ganeshnagar","wakadi"} s2={"wakadi","rahata"} s3=s1&s2 print("After intersection set: ",s3)
Output:



ASSIGNMENT 3

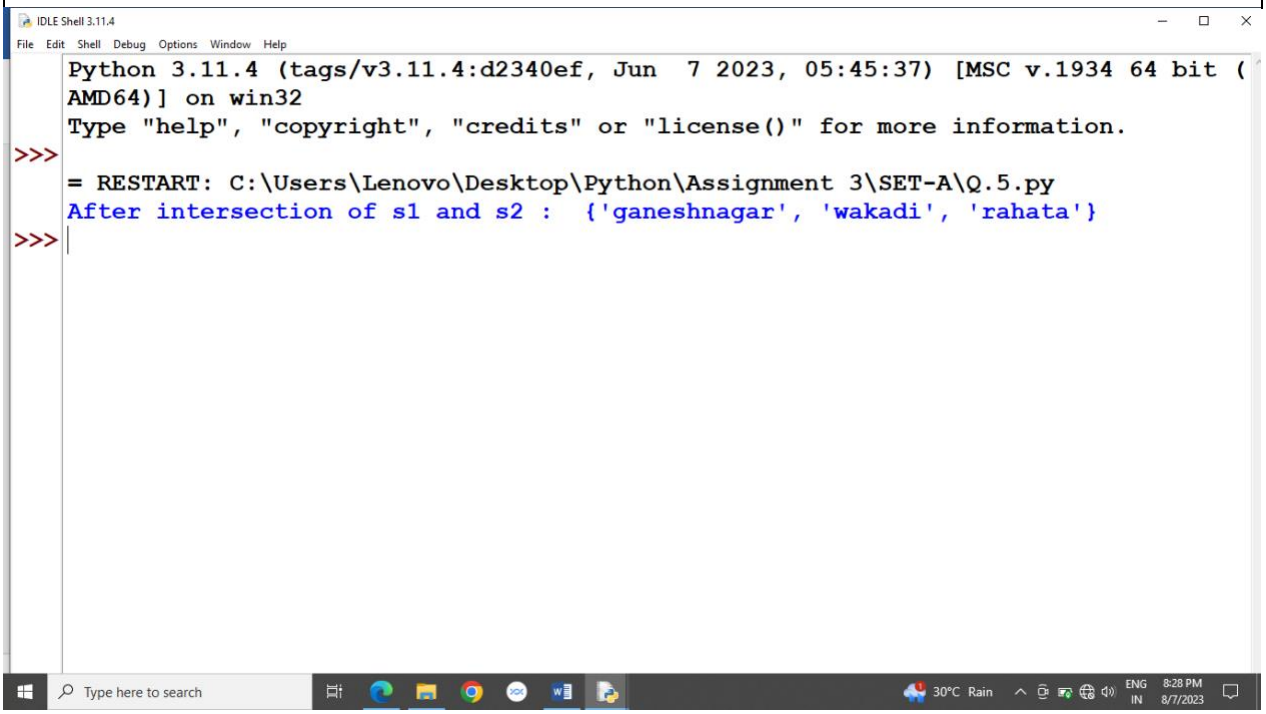
SET-A

Q.5. Write a Python program to create a union of sets.

Ans:

```
s1={"ganeshnagar","wakadi"}
s2={"wakadi","rahata"}
s3=s1|s2
print("After intersection of s1 and s2 : ",s3)
```

Output:



ASSIGNMENT 3

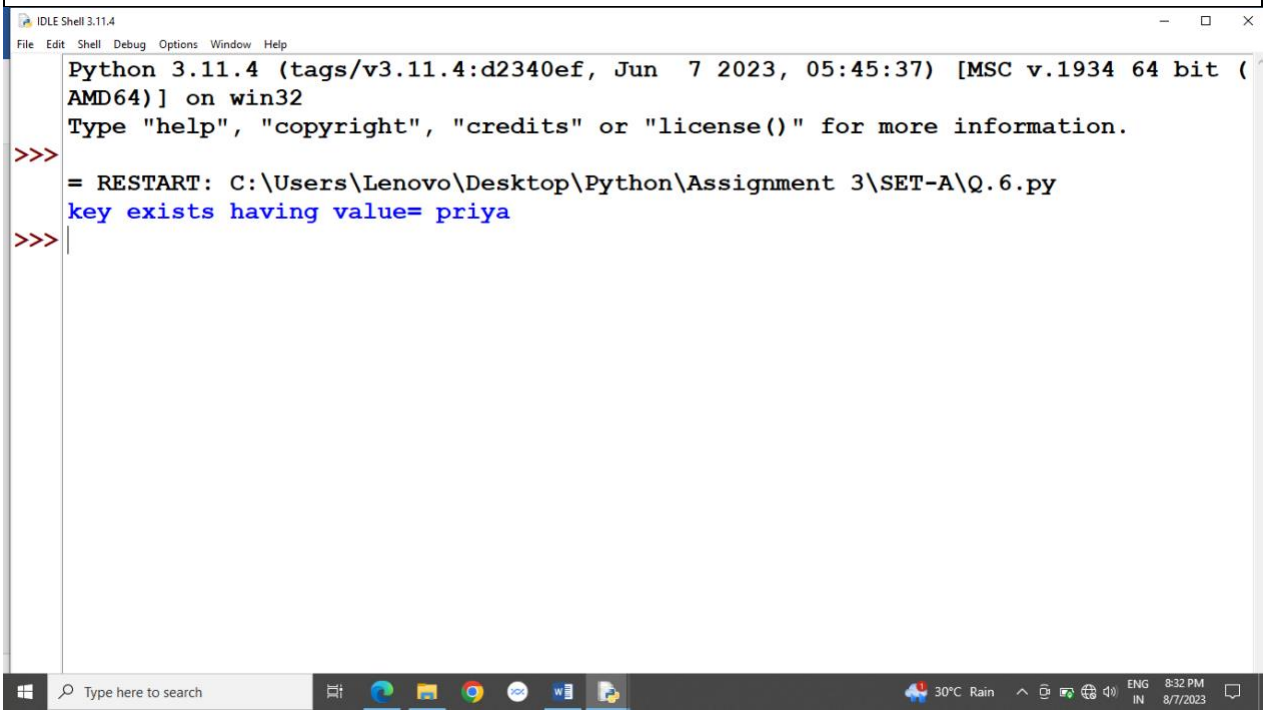
SET-A

Q.6 Write a Python script to check if a given key already exists in a dictionary.

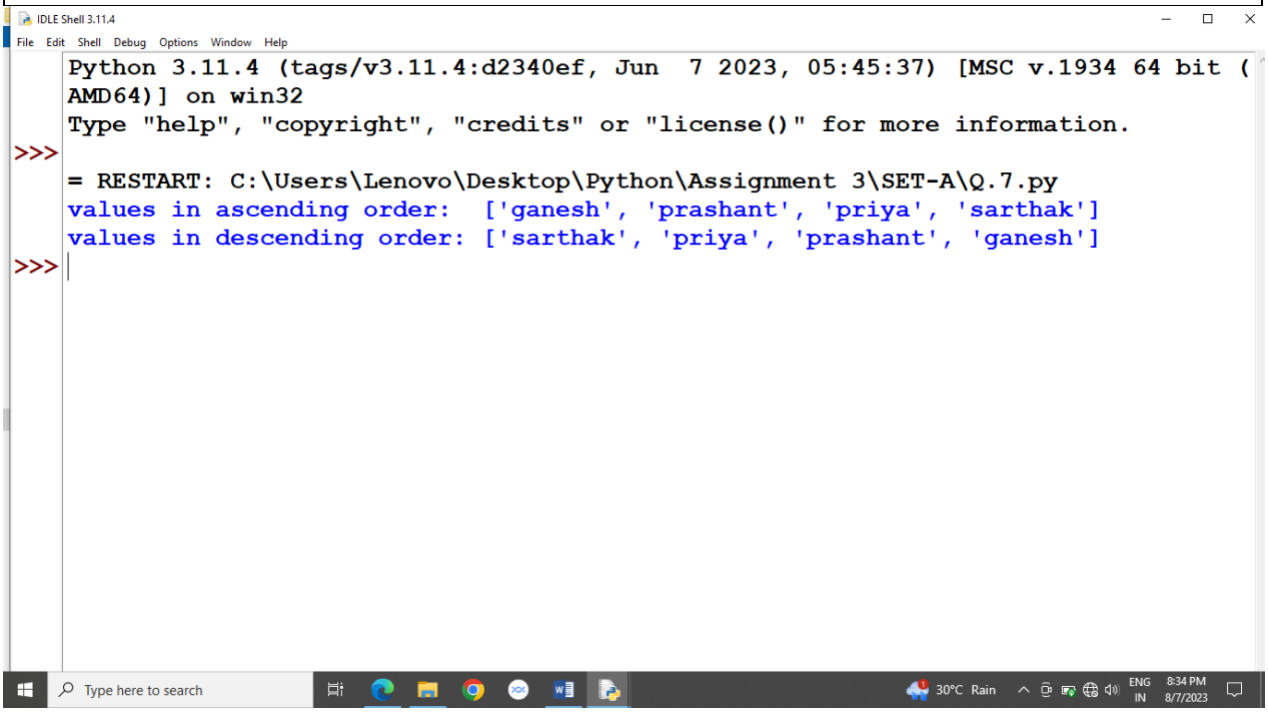
Ans:

```
d={1:"ganesh",2:"prashant",3:"sarthak",4:"priya"}
key=4
if key in d.keys():
   print(f"key exists having value= {d[key]}")
else:
   print("key not exist")
```

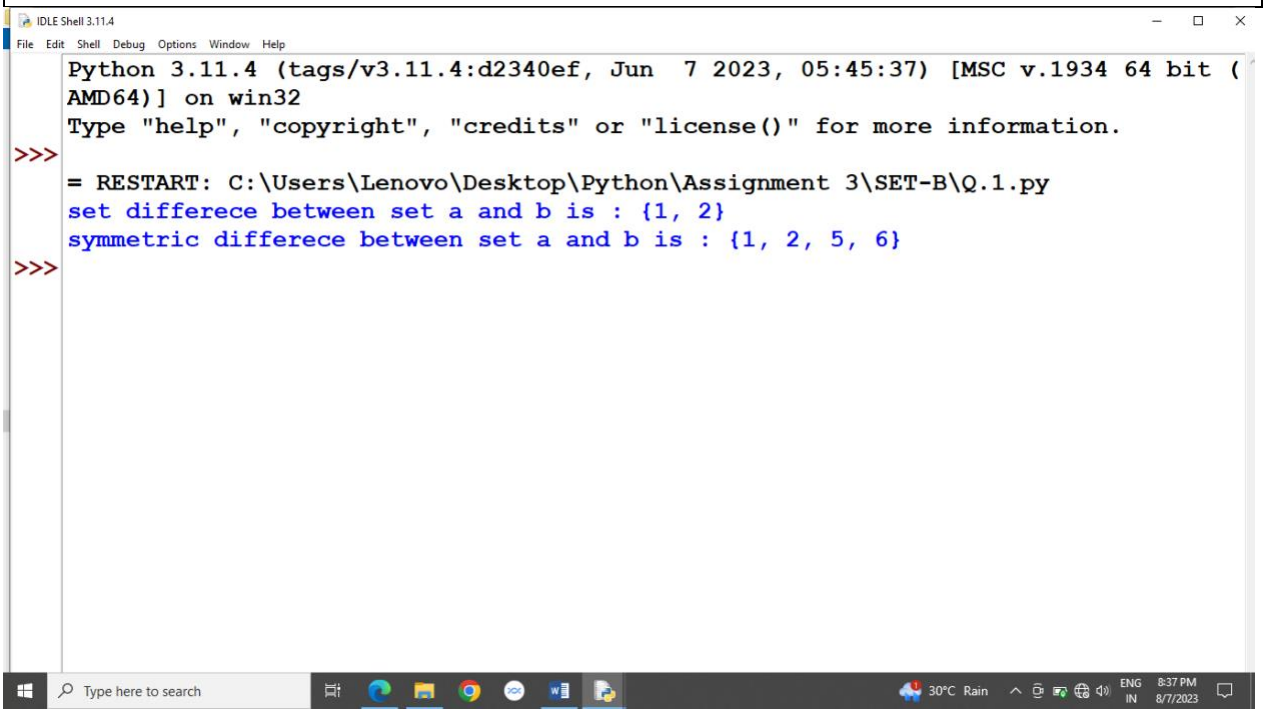
Output:



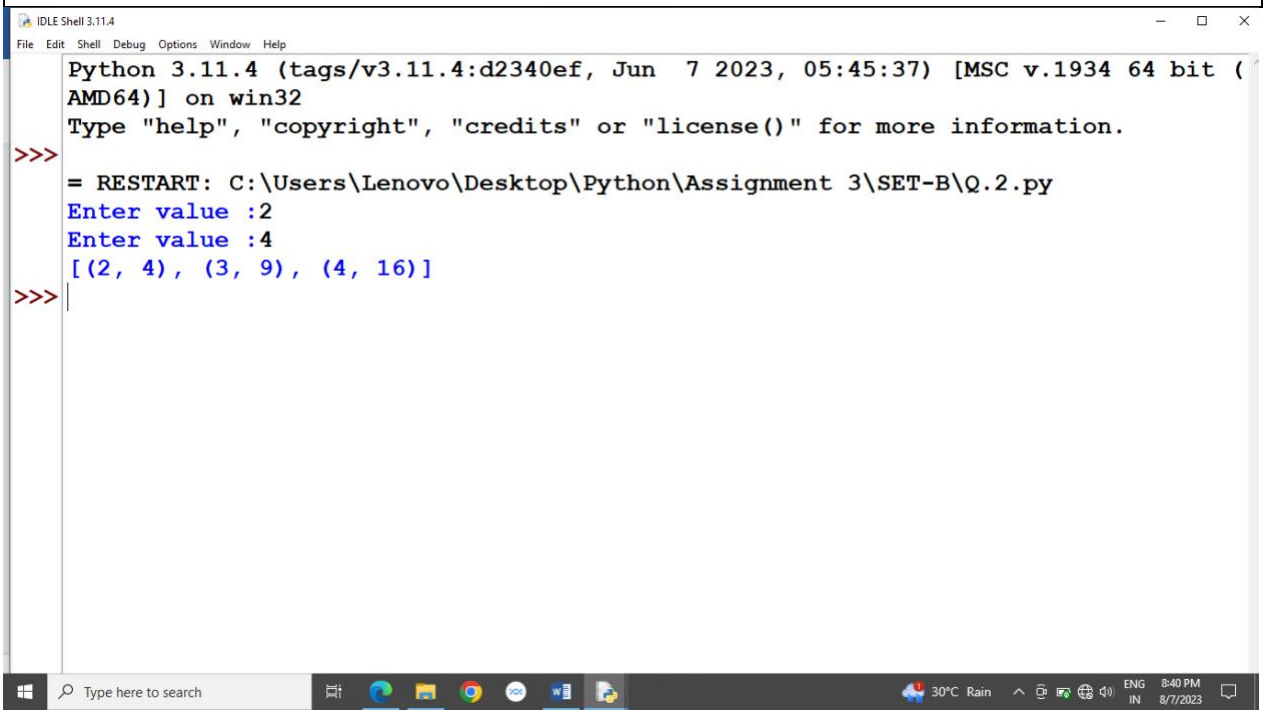
ASSIGNMENT 3
SET-A
Q.7 Write a Python script to sort (ascending and descending) a dictionary by value.
Ans: d={1:"ganesh",2:"prashant",3:"sarthak",4:"priya"} ascending=sorted(d.values()) reverse=sorted(d.values(),reverse=True) print("values in ascending order: ",ascending) print("values in descending order:",reverse)
Output:



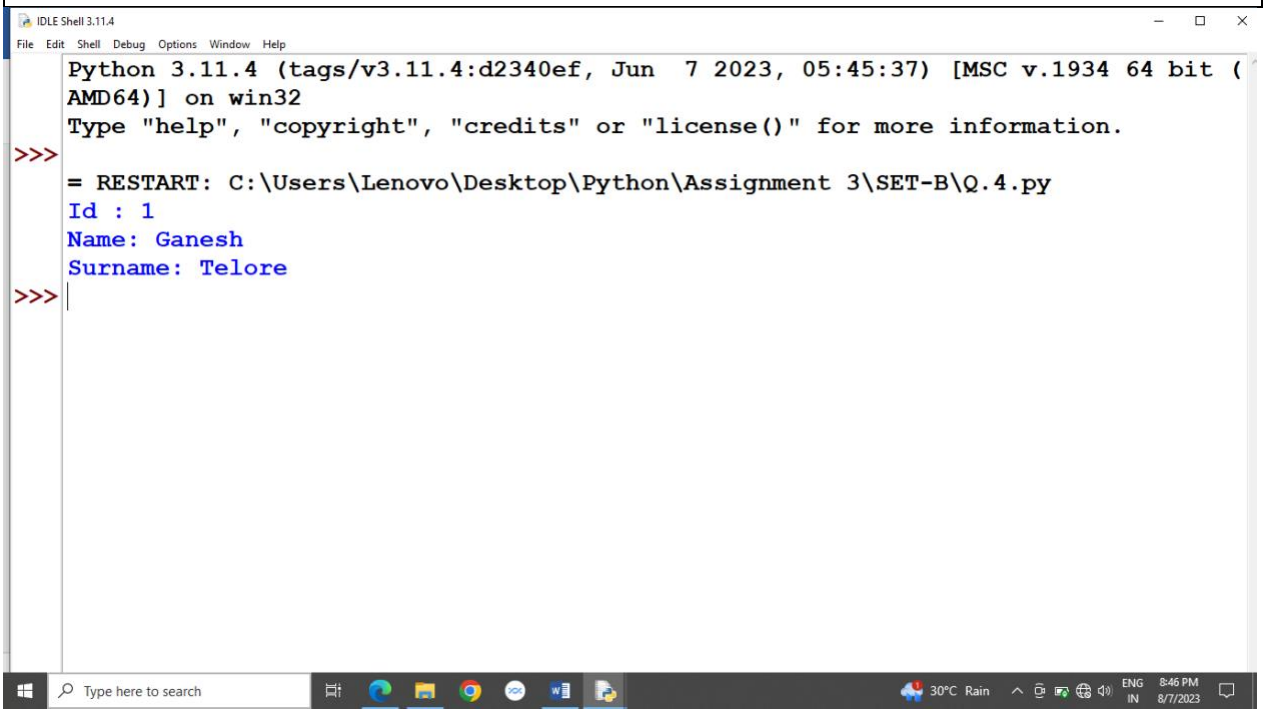
ASSIGNMENT 3
SET-B
Q.1 Write a Python program to create set difference and a symmetric difference
Ans: a={1,2,3,4} b={3,4,5,6} print("set differece between set a and b is :",a.difference(b)) print("symmetric differece between set a and b is :",a.symmetric_difference(b))
Output:



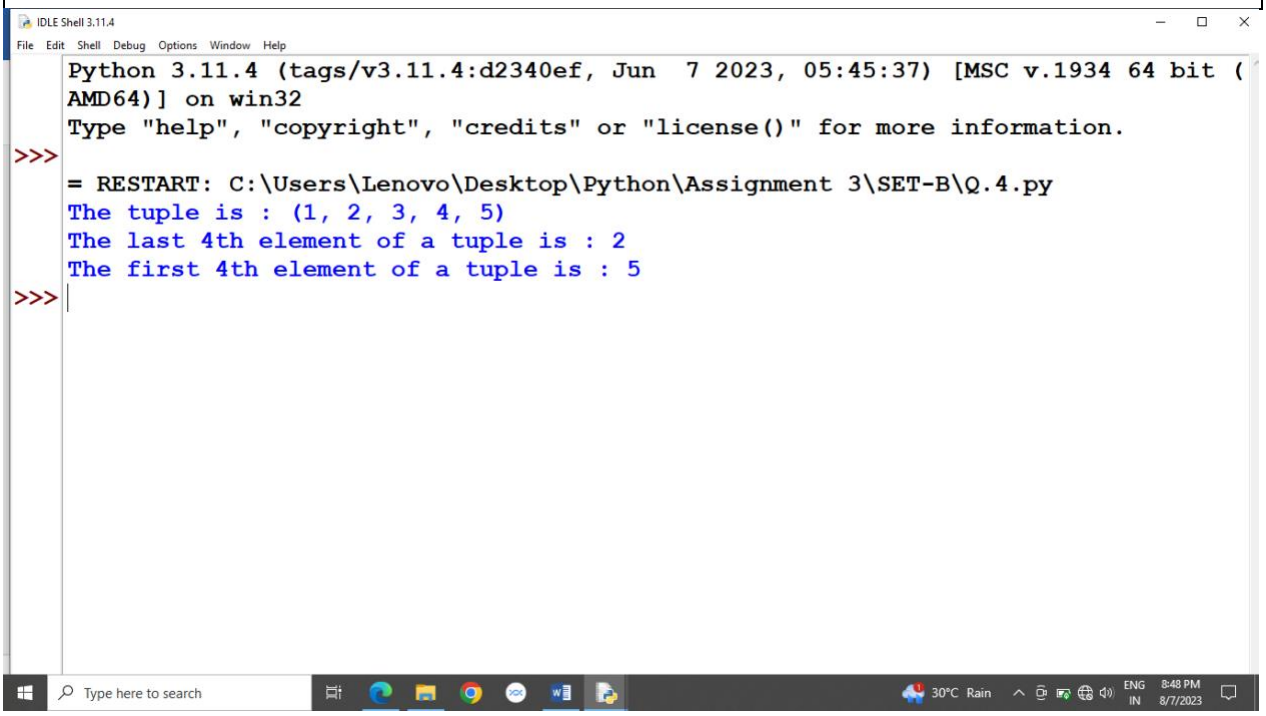
ASSIGNMENT 3
SET-B
Q.2 Write a Python program to create a list of tuples with the first element as the number and second element as the square of the number.
Ans: lr=int(input("Enter value :")) ur=int(input("Enter value :")) a=[(x,x**2) for x in range(lr,ur+1)] print(a)
Output:



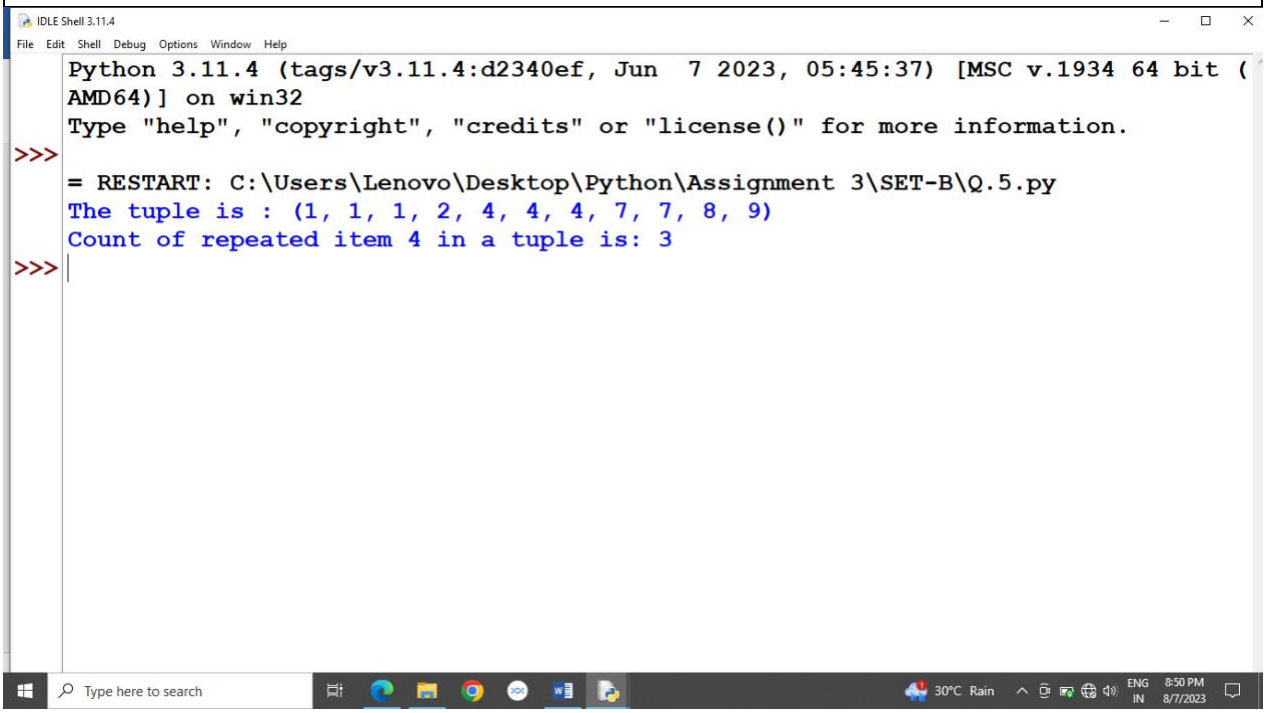
ASSIGNMENT 3
SET-B
Q.3 Write a Python program to unpack a tuple in several variables
Ans: t1=(1,"Ganesh","Telore") (id,fname,lname)=t1 print("Id :",id, "\nName:",fname,"\nSurname:",lname)
Output:



ASSIGNMENT 3
SET-B
Q.4 Write a Python program to get the 4th element from front and 4th element from last of a tuple.
Ans: t1=(1,2,3,4,5) print("The tuple is :",t1) print("The last 4th element of a tuple is :",t1[-4]) print("The first 4th element of a tuple is :",t1[4])
Output:



ASSIGNMENT 3
SET-B
Q.5 Write a Python program to find the repeated items of a tuple.
Ans: t1=(1,1,1,2,4,4,4,7,7,8,9) print("The tuple is :",t1) print("Count of repeated item 4 in a tuple is:",t1.count(4))
Output:



ASSIGNMENT 3

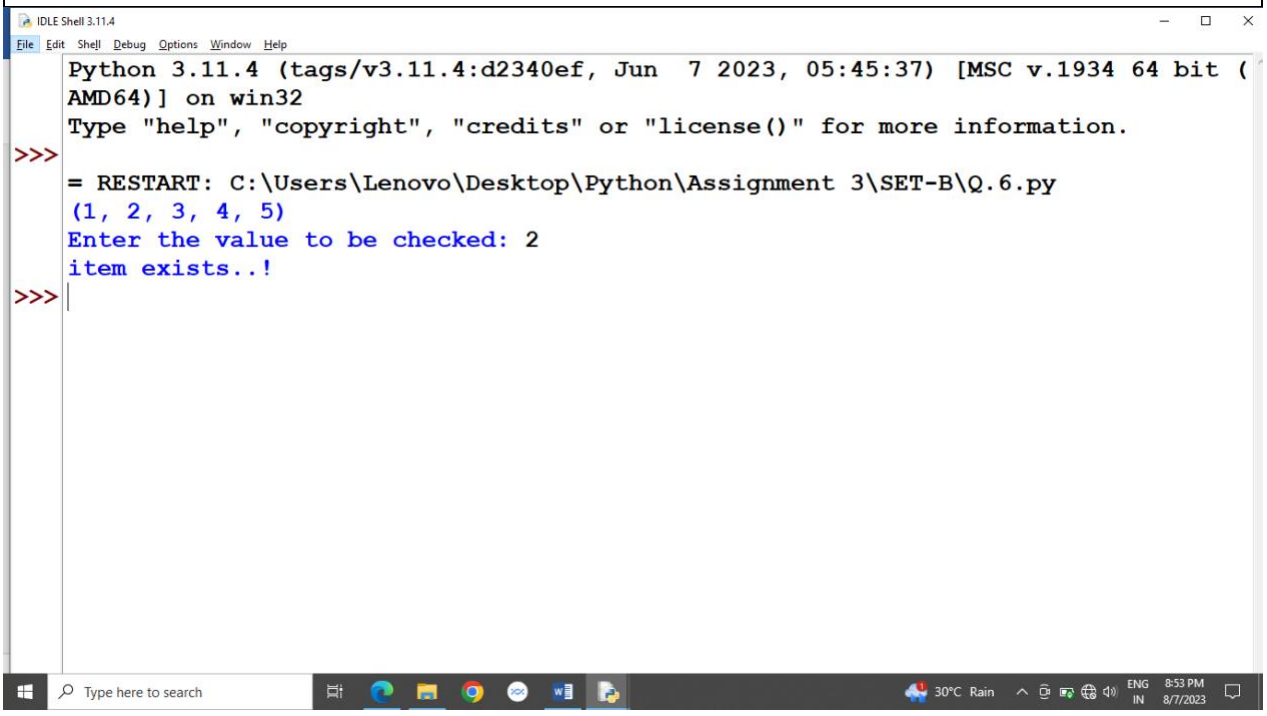
SET-B

Q.6 Write a Python program to check whether an element exists within a tuple.

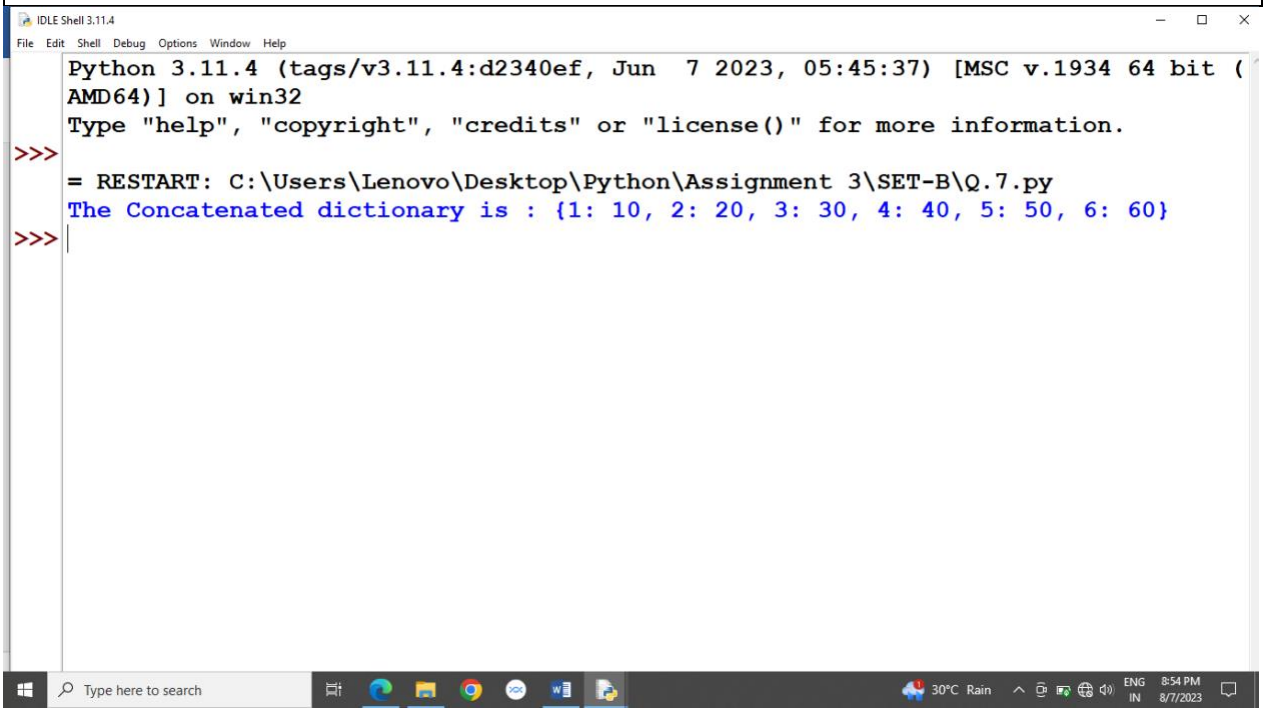
Ans:

```
t1=(1,2,3,4,5)
print(t1)
val=int(input("Enter the value to be checked: "))
if val in t1:
   print("item exists..!")
else:
   print("item does not exists!!!")
```

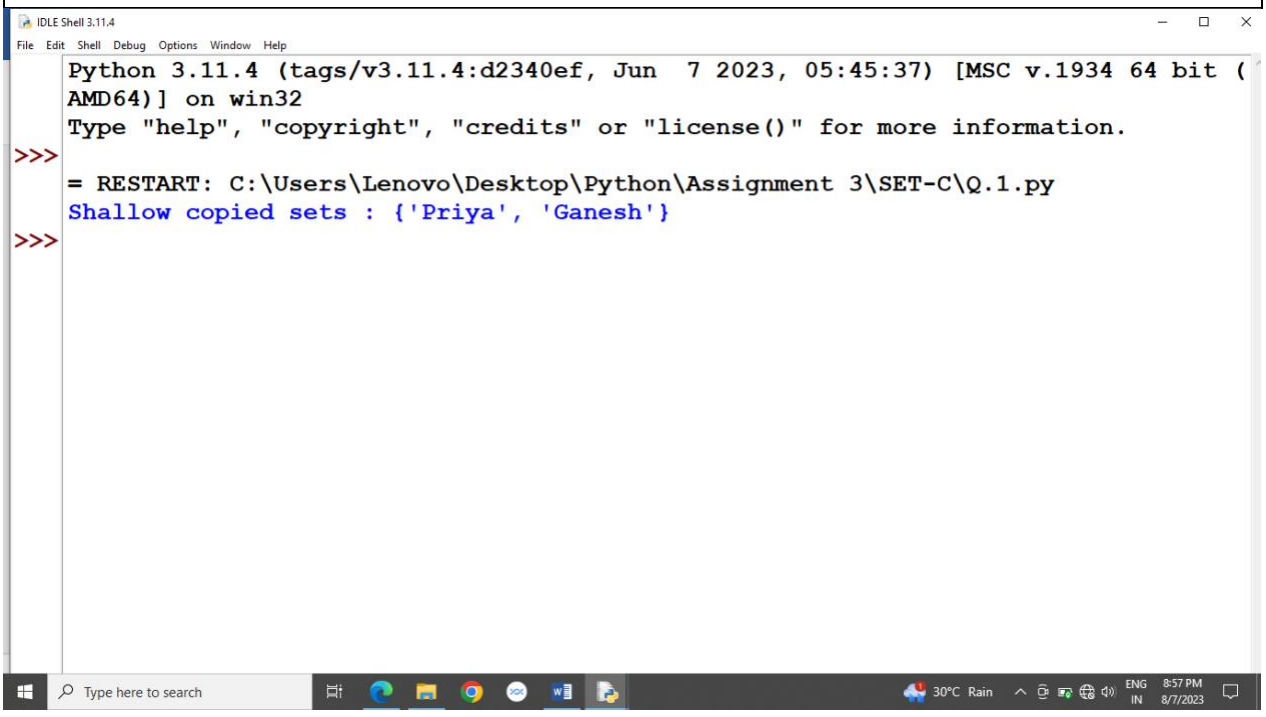
Output:



ASSIGNMENT 3
SET-B
Q.7 Write a Python script to concatenate following dictionaries to create a new one. Sample Dictionary : dic1={1:10, 2:20} dic2={3:30, 4:40} dic3={5:50,6:60} Expected Result : {1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}
Ans: dic1={1:10,2:20} dic2={3:30,4:40} dic3={5:50,6:60} dic={**dic1,**dic2,**dic3} print("The Concatenated dictionary is :",dic)
Output:



ASSIGNMENT 3
SET-C
Q.1 Write a Python program to create a shallow copy of sets
Ans: s1={"Ganesh","Priya"} s2={"Priya","Ganesh"} cpy=s1.copy() print("Shallow copied sets :",cpy)
Output:



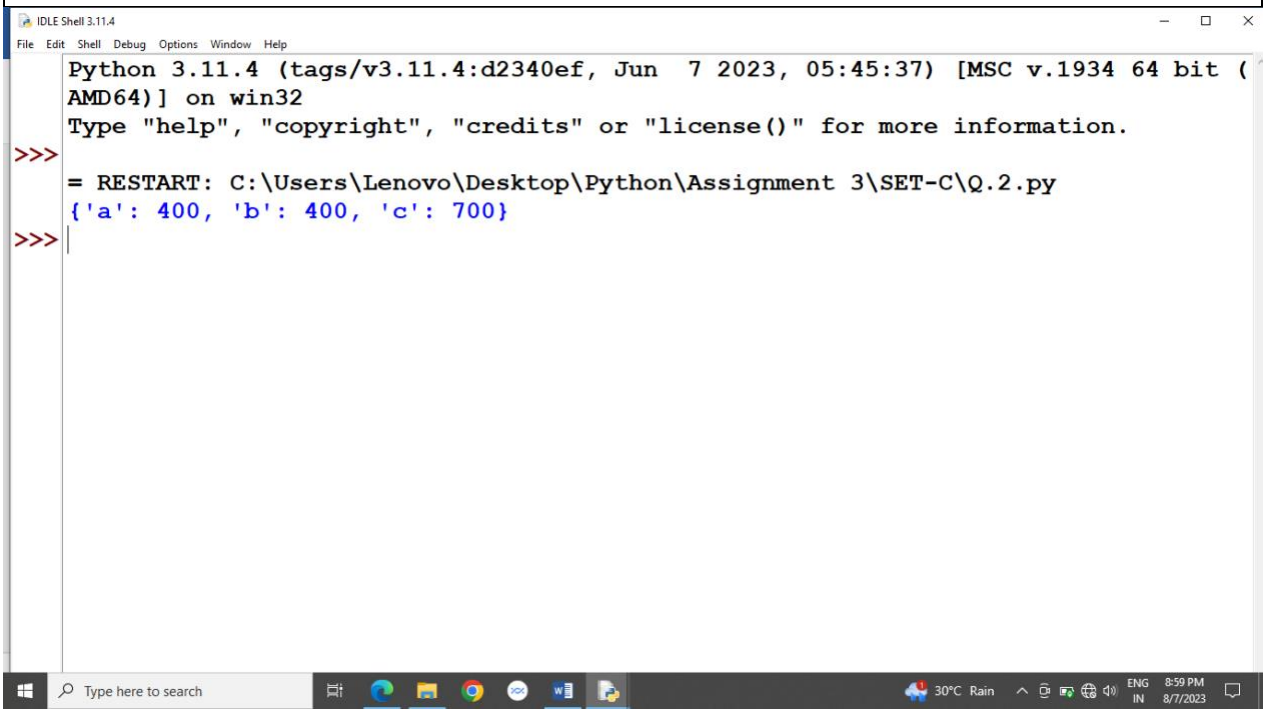
ASSIGNMENT 3
SET-C
Q.2 Write a Python program to combine two dictionary adding values for common keys. d1 = {'a': 100, 'b': 200, 'c':300} d2 = {'a': 300, 'b': 200, 'd':400} Sample output: Counter({'a': 400, 'b': 400, 'd': 400, 'c': 300})

Ans:

```
a={"a":100,"b":200,"c":300}
b={"a":300,"b":200,"c":400}
c=a.copy()
for i in b:
   if i in c:
      c[i]=c[i]+b[i]
   else:
      c[i]=b[i]

print(c)
```

Output:



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