ASSIGNMENT NO:-1

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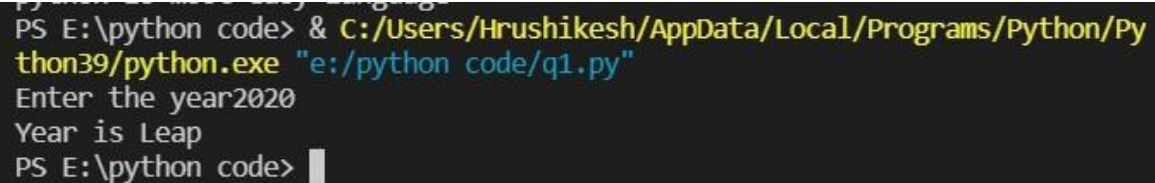
Q.1 :- Write a Python Program to Check Whether a Given Year is a Leap Year

Solution:-

Code:-

```python
n1 = int(input("Enter the year"))
if n1%4==0:
    print("Year is Leap")
else :
    print("year is not leap")
```

Output:-

```
PS E:\python code> & C:/Users/Hrushikesh/AppData/Local/Programs/Python/Py
thon39/python.exe "e:/python code/q1.py"
Enter the year2020
Year is Leap
PS E:\python code>
```

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Q.2:- Write a Python Program to Merge Two Lists and Sort it and Find the Largest Number in a List

Solution:-

Code:-

```python
first_list = []
second_list = []

count_first_list = int(input("Enter total numbers of the first list : "))

for i in range(1,count_first_list+1):
  no = int(input("Enter : "))
  first_list.append(no)

count_second_list = int(input("Enter total numbers of the second list : "))

for i in range(1,count_second_list+1):
  no = int(input("Enter : "))
  second_list.append(no)
```

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print("First list : ",first_list)

print("Second list : ",second_list)

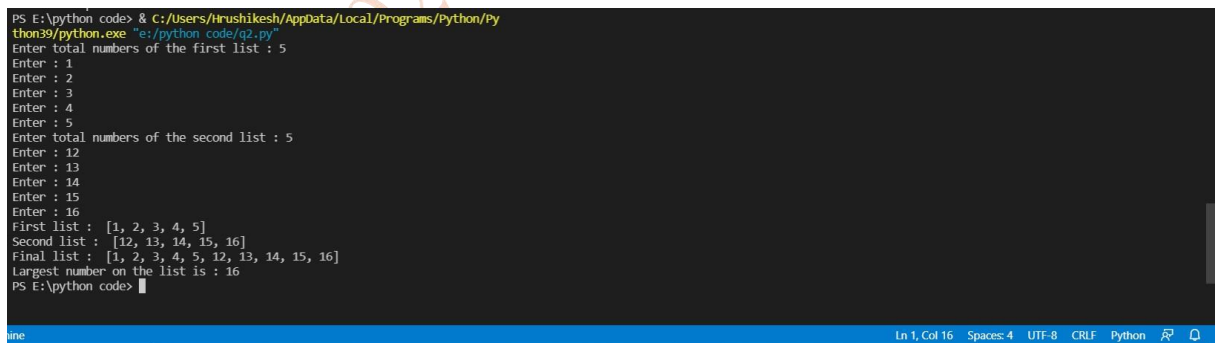final_list = first_list + second_list

final_list.sort()

print("Final list : ",final_list)

print("Largest number on the list is :",max(final_list))
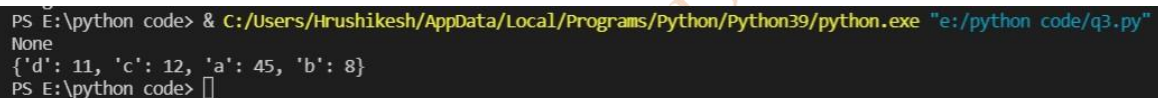
Output:-

```
PS E:\python code> & C:/Users/Hrushikesh/AppData/Local/Programs/Python/Py
thon39/python.exe "e:/python code/q2.py"
Enter total numbers of the first list : 5
Enter : 1
Enter : 2
Enter : 3
Enter : 4
Enter : 5
Enter total numbers of the second list : 5
Enter : 12
Enter : 13
Enter : 14
Enter : 15
Enter : 16
First list :  [1, 2, 3, 4, 5]
Second list :  [12, 13, 14, 15, 16]
Final list :  [1, 2, 3, 4, 5, 12, 13, 14, 15, 16]
Largest number on the list is : 16
PS E:\python code>
```

Q.3:- Write a Python Program to Concatenate Two Dictionaries Into One

Program:-

```python
def Merge(a1, a2):
    return(a2.update(a1))
a1= {'a':45,'b':8}
a2={'d':11,'c':12}
print(Merge(a1,a2))
print(a2)
```

Output:-

```
PS E:\python code> & C:/Users/Hrushikesh/AppData/Local/Programs/Python/Python39/python.exe "e:/python code/q3.py"
None
{'d': 11, 'c': 12, 'a': 45, 'b': 8}
PS E:\python code> []
```

Q.4:- Write a Python Program to Create a Class which Performs Basic Calculator Operations

Program:-

```python
    class cal():
  def __init__(self,a,b):
    self.a=a
    self.b=b
```

```python
    def add(self):
        return self.a+self.b
    def sub(self):
        return self.a-self.b
    def multi(self):
        return self.a*self.b
    def divide(self):
        return self.a/self.b


a = int(input("Enter first number"))
b = int(input("Enter the second number:"))
obj=cal(a,b)
while True:
    def menu():
        x = ('1.Add \n2.sub \n3.multiply \n4.Divide')
        print(x)
    menu()
    choice = int(input("Please select one of the following"))
    if choice == 1:
        print("Result: ",obj.add())
    elif choice == 2:
        print("Result: ",obj.sub())
    elif choice == 3:
        print("Result: ",obj.multi())
    elif choice == 4:
```

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```
        print("Result: ",obj.divide())
    elif choice == 0:
        print("again try one of the following")
        break
```
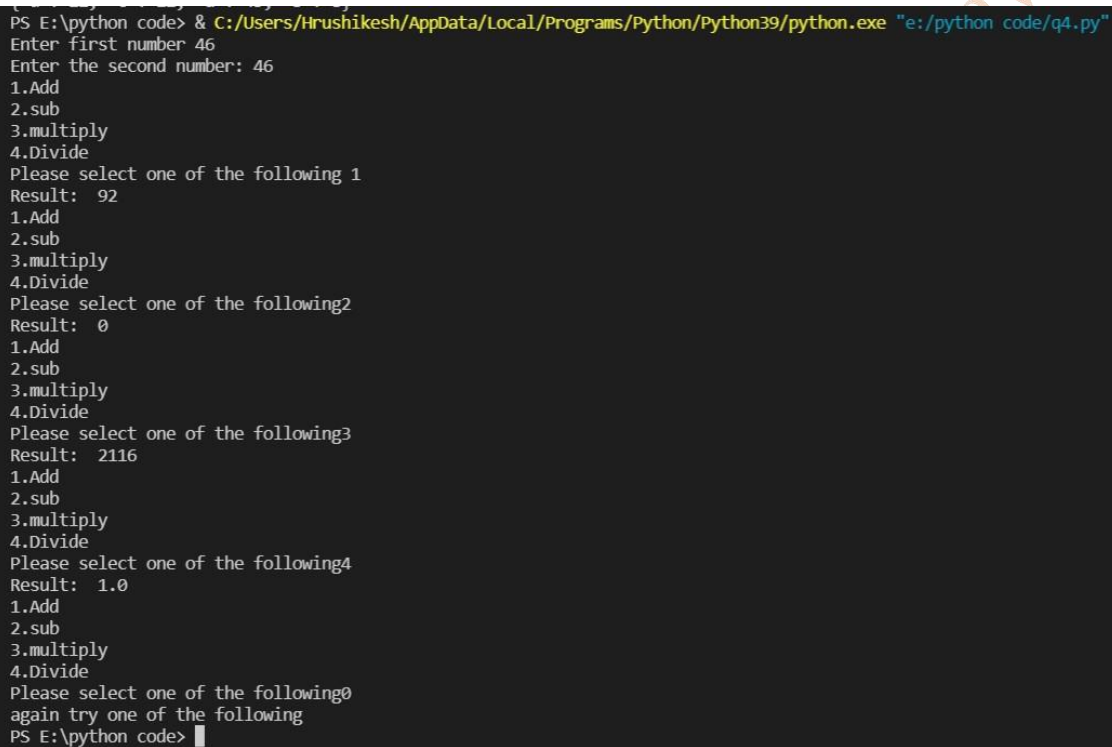
Output:-

Q.5:- Write a Python Program to for multiple inheritance

Program:-

#write program on multiple inheritance

```python
class python:
    def m(self):
        print("python is most easy language")
class html(python):
    def m(self):
        print("html is the base of the web applications")
class css(python):
    def m(self):
        print("css is used for the style")
class django(html,css):
    def m(self):
        print("html and css used for the frontend and django used for
backend")
web = django()
web.m()
html.m(web)
css.m(web)
python.m(web)
```

Output:-

```
PS E:\python code> & C:/Users/Hrushikesh/AppData/Local/Programs/Python/Python39/python.exe "e:/python code/q5.py"
html and css used for the frontend and django used for backend
html is the base of the web applications
css is used for the style
python is most easy language
PS E:\python code> []
```

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