Assignment -3

Python Programming

Assignment Date	30 September 2022
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Student Roll Number	621319205303
Maximum Marks	2 Marks

QUESTION 1:

What is 7 to the power of 4?

SOLUTION:

a=int(input("Enter base value:"))
b=int(input("Enter exponent value:"))
c=pow(a,b)
print(c)

```
a=int(input("Enter base value:"))
b=int(input("Enter exponent value:"))
c=pow(a,b)
print(c)
```

```
Enter base value:7
Enter exponent value:4
2401
```

QUESTION 2:

Split this string:

s = "Hi there Sam!"

SOLUTION:

s="Hi there Sam!"
c=s.split()
print(c)

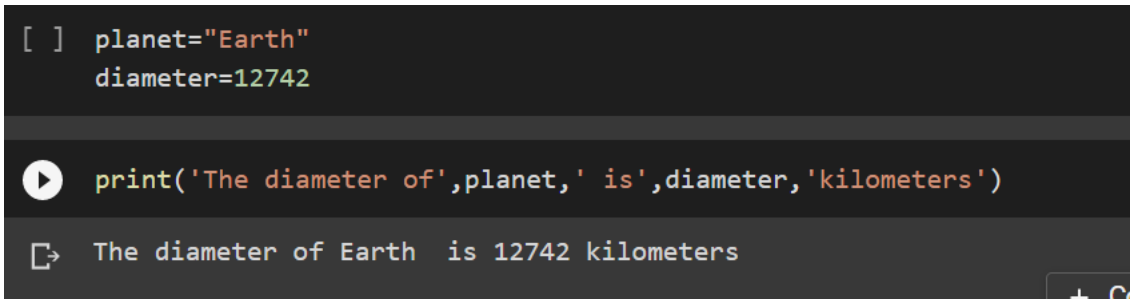
```
[ ]  s="Hi there Sam!"
     c=s.split()

[ ]  print(c)
```

```
['Hi', 'there', 'Sam!']
```

QUESTION 3:
Given the variables:
planet = "Earth"
diameter = 12742
Use .format() to print the following string:
The diameter of Earth is 12742 kilometers.

SOLUTION:

```
planet="Earth"
diameter=12742
print('The diameter of',planet,' is',diameter,'kilometers')
```



QUESTION 4:
Given this nested list, use indexing to grab the word "hello"
lst = [1,2,[3,4],[5,[100,200,['hello']],23,11],1,7]

SOLUTION:

```
print(lst[3][1][2][0])
```

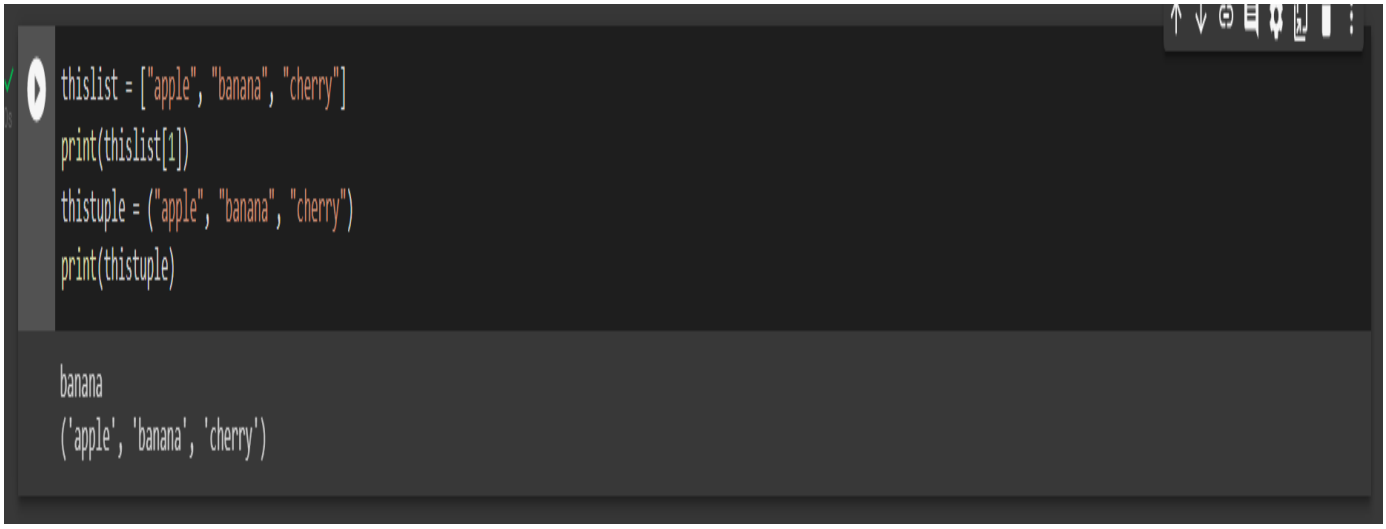
QUESTION 5:
Given this nest dictionary grab the word "hello". Be prepared, this will be annoying/tricky
d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]}

SOLUTION:
print(d['k1'][3]["tricky"][3]['target'][3])

```
[ ]  d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]}

     print(d['k1'][3]["tricky"][3]['target'][3])

     hello
```

QUESTION 6:
What is the main difference between a tuple and a list?

SOLUTION:
thislist=[“apple”,”banana”,”cherry”]
print(thislist[1])
thistuple=[“apple”,”banana”,”cherry”]
print(thistuple)



QUESTION 7:
Create a function that grabs the email website domain from a string in the form:

SOLUTION:
email = input("Enter Email:")
domainGet(email)
defdomainGet(email):
print("Your domain is: " + email.split('@')[-1])

```
email = input("Enter Email:")
domainGet(email)
```

```
Enter Email:user@domain.com
Your domain is: domain.com
```

```
def domainGet(email):
    print("Your domain is: " + email.split('@')[-1])
```

QUESTION 8:
Create a basic function that returns True if the word 'dog' is contained in the input string. Don't worry about edge cases like a punctuation being attached to the word dog, but do account for capitalization.

SOLUTION:
def dog(st):
if 'dog' in st.lower():
print("True")
else:
print("False")

a= input("Enter String:")
dog(a)

```
[6] def dog(st):
        if 'dog' in st.lower():
            print("True")
        else:
            print("False")
```

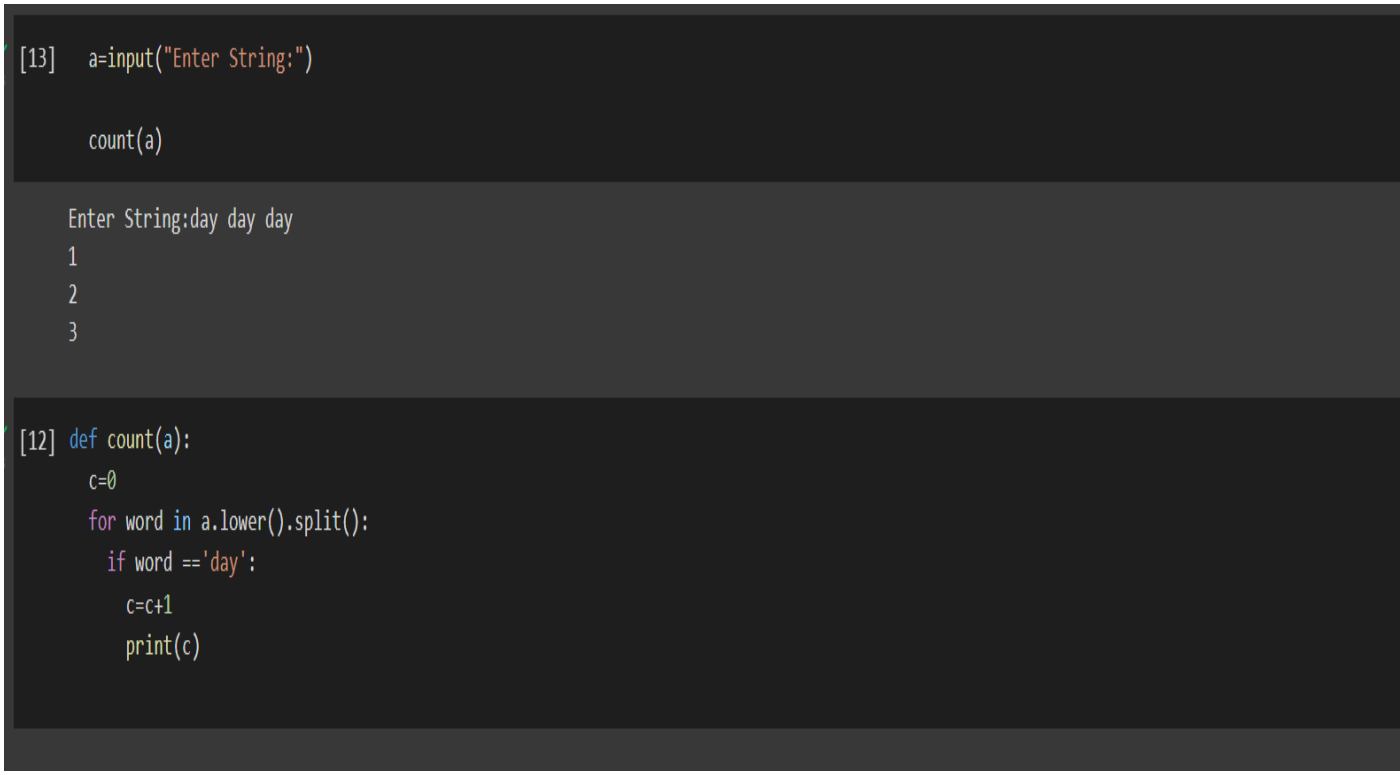
```
a= input("Enter String:")
dog(a)
```

```
Enter String:dog
True
```

QUESTION 9:
Create a function that counts the number of times the word "dog" occurs in a string. Again ignore edge cases.

SOLUTION:

```
a = input("Enter String:")
def count(a):
   c=0
for word in a.lower().split():
if word=='day':
        c = c + 1
print(c)
count(a)
```



```
[13]  a=input("Enter String:")

      count(a)

    Enter String:day day day
    1
    2
    3
```

```
[12] def count(a):
       c=0
       for word in a.lower().split():
         if word =='day':
           c=c+1
           print(c)
```

QUESTION 10:

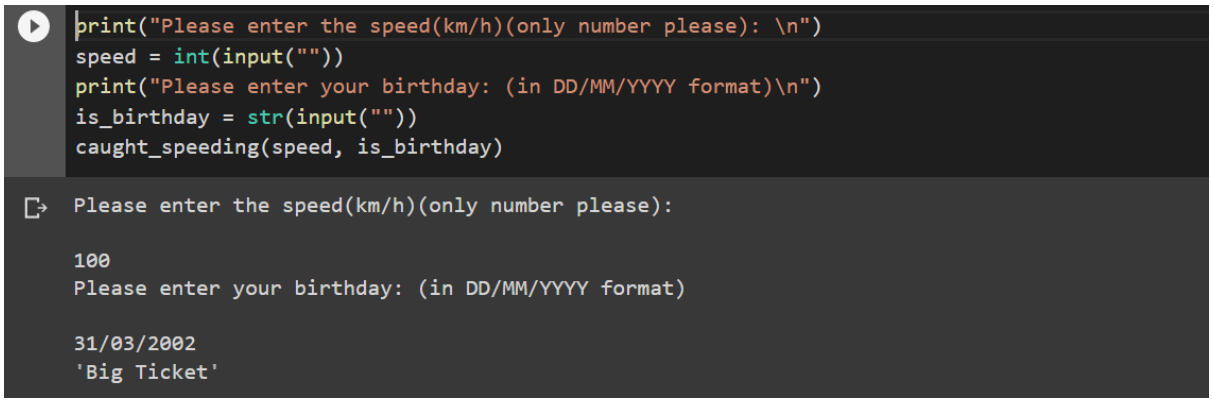
You are driving a little too fast, and a police officer stops you. Write a function to return one of 3 possible results: "No ticket", "Small ticket", or "Big Ticket". If your speed is 60 or less, the result is "No Ticket". If speed is between 61 and 80 inclusive, the result is "Small Ticket". If speed is 81 or more, the result is "Big Ticket". Unless it is your birthday (encoded as a boolean value in the parameters of the function) -- on your birthday, your speed can be 5 higher in all cases.

SOLUTION:

```
defcaught_speeding(speed, is_birthday):
ifis_birthday:
speeding = speed - 5
else:
speeding = speed
```

if speeding > 80:
return 'Big Ticket'
elif speeding > 60:
return 'Small Ticket'
else:
return 'No Ticket'

print("Please enter the speed(km/h)(only number please): \n")
speed = int(input(""))
print("Please enter your birthday: (in DD/MM/YYYY format)\n")
is_birthday = str(input(""))
caught_speeding(speed, is_birthday)



QUESTION 11:
Create an employee list with basic salary values(at least 5 values for 5 employees) and using a for loop retreive each employee salary and calculate total salary expenditure.

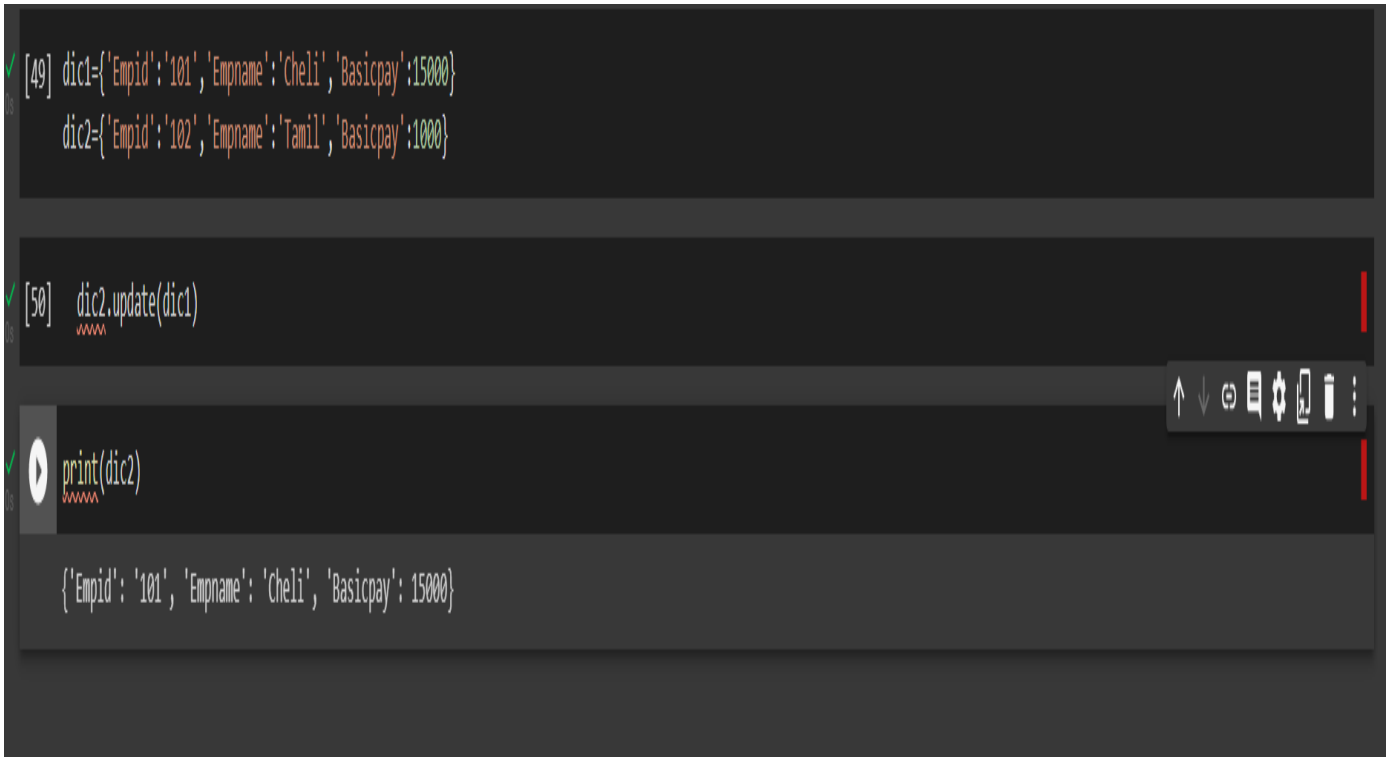
SOLUTION:
emp=[10000,20000,30000,40000,50000]
emp[1]
sum=0
fori in emp:
sum=sum+i
print(sum)

```
emp=[10000,20000,30000,40000,50000]

[13] emp[1]

     20000

     sum=0
     for i in emp:
       sum=sum+i
     print(sum)

     150000
```

QUESTION 12:
Create two dictionaries in Python:
First one to contain fields as Empid, Empname, Basicpay
Second dictionary to contain fields as DeptName, DeptId.
Combine both dictionaries.

SOLUTION:

```
dic1={'Empid':'101','Empname':'cheli','Basicpay':'15000'}
dic2={'Empid':'102','Empname':'Tamil','Basicpay':'10000'}
dic2.update(dic1)
print(dic2)
```


[49] dic1={'Empid':'101','Empname':'Cheli','Basicpay':15000}
dic2={'Empid':'102','Empname':'Tamil','Basicpay':1000}
[50] dic2.update(dic1)
print(dic2)
{'Empid': '101', 'Empname': 'Cheli', 'Basicpay': 15000}