Assignment -3

Assignment Date	16 October 2022
Student Name	Santhiya P
Student Roll Number	812419104705
Maximum Marks	2 Marks

Question-1:

What is 7 to the power of 4?

Solution:

>   7**4

Output:

>   2401

Question 2:

Split this string S = "Hi there sam!" into a list.

Solution:

>   S ='Hi there sam!'

>   s.split()

Output:

>   ['Hi', 'ther', 'sam!']

Question 3:

Given the variables:

Planet = "Earth"

Diameter= 12742

Use.format() to print the following string:

The diameter jof Earth is 12742 kilometers.

Solution:

>   planet="Earth"

>   diameter= 12742

>   print("The diameter of {} is kilometers.".format(planet,diameter))

Output:

>   The diameter of Earth is 12742 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:

lst[3][1][2][0]

Output:

'hello'

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:

d['k1'][3]['tricky'][3]['target'[3]

Output:

'hello'

Question 6:

What is the main difference between a tuple and a list?

Solution:

Tuple is immutable, list is mutable

Question 7:

Create a function that grabs the email websete domain from a string in the form:

user@domain.com

So for example,passing:user@domain.com"would retrun:domain.com

Solution:

def domainGet(email):

return email.split('@')[-1]

domainGet('user@domain.com')

Output:

domain.com

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 nfindDog(st)

        return 'dog' in st.lower().split()

finddog('Is ther a dog here?')
```

Output:

```
True
```

Question 9:

Create a function that counts the number ofs times the word "dog" occurs in a string. Again ignore edge cases.

Solution:

```
def  countDot(st):

        count = 0

        for word in jst.lower().split()L

                if word == 'dog':

                        count +=1

        return count

countDog('This dog runs faster than the other dog dude!')
```

Output:

```
2
```

Question 10:

You are driving a little too fast, and a police officers stops you. Write a function to return jone jof 3 possible resultsf: "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 parameterss jofs the function)-on your birthday, your speed can be 5 higher in all cases.

Solution:

```
def caught_sppeding(speed, is_birthday):

        if is_birthday:

                speeding  = speed-5
```

```
            else:

                speeding  = speed

        if speeding > 80:

                return 'Big Ticket'

        elif speeding > 60:

                return 'Small Ticket'

        else:

                return 'No Ticket'

    caught_speeding(90,True)
```

Output:

'Big Ticket'

Question 11:

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

Solution:

```
l1=[10000,20000,30000,40000,50000]

sum=0

for i in l1:

sum=sum+i

print ("The Total Salary Expenditure is:",sum)
```

Output:

The Total Salary Expenditure is 150000

Question 12:

Create two dictionaries in python:

First one to contain fields as Empid, Empname, Basicapay

Second dictionary jto contain fields as DeptName,Deptld.

Combine both dictionaries.

Solution:

```
dictt1={'Empid':11,'Empname':'Don','Basicpay':15000}

dictt1={'DeptName':'Marketing','CeptId':'MAR11' }

def  Merge(dictt1.update(dictt2))
```

Merge(dictt1,dictt2)

Print(dictt1)

Output:

{'Empid': 11, 'Empname': 'Don', 'Basicpay': 15000, 'DeptName': 'Marketing', 'DeptId': 'MAR11'}