

Assignment -3

Assignment Date	03 November 2022
Student Name	RoohiFathima K M
Student Roll Number	812419104707
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".Beprepared,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:

```
defdomainGet(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 findDog(st):  
    return 'dog' in st.lower().split()  
  
findDog('Is there a dog here?')
```

Output:

True

Question 9:

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

Solution:

```
def countDog(st):  
    count = 0  
    for word in st.lower().split():  
        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 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:

```
def caught_speeding(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','Ceptld':'MAR11'    }
def Merge(dictt1.update(dictt2))

Merge(dictt1,dictt2)

Print(dictt1)

```

Output:

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