Assignment Date	28 October 2022
Name	Kishore S
Roll NO	CS19018
Maximum Mark	2 Marks

Exercises

Answer the questions or complete the tasks outlined in bold below, use the specific method described if applicable.

** What is 7 to the power of 4?**

```
7**4
```

```
2401
```

** Split this string:**

```
s = "Hi there Sam!"
```

*into a list. *

```
s = "Hi there Sam!"
splitoutput=s.split(" ")
splitoutput
```

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

** Given the variables:**

```
planet = "Earth"
diameter = 12742
```

** Use .format() to print the following string: **

```
The diameter of Earth is 12742 kilometers.
planet = "Earth"
diameter = 12742
print("The diameter of {} is {} kilometers."
        .format(planet, diameter))
```

```
The diameter of Earth is 12742 kilometers.
    The diameter of Earth is 12742 kilometers.
```

** Given this nested list, use indexing to grab the word "hello" **

```
lst = [1,2,[3,4],[5,[100,200,['hello']],23,11],1,7]
```

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

```
    ['hello']
```

** Given this nest dictionary grab the word "hello". Be prepared, this will be

- List item
- List item

annoying/tricky **

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

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

```
    'hello'
```

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

```
print(f"Differences between a list and a tuple:\na) list is mutable, but tuple is immutable\n
```

```
    Differences between a list and a tuple:
    a) list is mutable, but tuple is immutable
    b) List iteration is slower and is time consuming, but Tuple iteration is faster
    c) List is useful for insertion and deletion operations, but Tuple is useful for readon:
```

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

user@domain.com

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

```
def domainGet(email):
    return email.split('@')[-1]
domainGet('user@domain.com')
```

```
    'domain.com'
```

** 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. **

       2

```python
def findDog(st):
    return 'dog' in st.lower()
```

```python
findDog('DOG is a my pet animal')
```

       True

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

```python
def countDog(st):
    count = 0
    for word in st.lower().split():
        if word == 'dog':
            count += 1
    return count
```

```python
countDog('This dog runs faster than the other dog gg!?')
```

Problem

*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. *

```python
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(62,False)

    'Small Ticket'


caught_speeding(82,False)

    'Big Ticket'
```

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.

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.

```
def Merge(dict1, dict2):
    for i in dict2.keys():
        dict1[i]=dict2[i]
    return dict1

# Driver code
dict1 = {'Empid': 12250, 'Empname': 'Raja','Basicpay': 28000}
dict2 = {'DeptName': 'CS', 'DeptId': 'cs240'}
dict3 = Merge(dict1, dict2)
print(dict3)

    {'Empid': 12250, 'Empname': 'Raja', 'Basicpay': 28000, 'DeptName': 'CS', 'DeptId': 'cs24
```

◀   ▶

Colab paid products - Cancel contracts here

✓ 0s   completed at 8:06 PM   ● ✕