Assignment -3

Python Programming

Assignment Date	10 October 2022
Student Name	Shamini b
Student Roll Number	AC19UCS101
Maximum Marks	2 Marks

Exercises

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

** Split this string:**

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

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

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

```
7**4
```

```
2401
```

** Given the variables:**

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

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

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

```
print('the diameterof {}is {}kilometer'.format(planet,diameter))
```

```
the diameterof Earthis 12742kilometer
```

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

```
hello
```

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

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

```
hello
```

** 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']}]}]}

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

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

```
tuple=(1,2,3)
list=[1,2,3]
```

** 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

```
email="user@domain.com"
email.split('@')[-1]
```

```
'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. **

```
def finddog(st):
  return 'dog' in st.lower().split()
```

```
finddog("is there any dog here?")
```

```
     True
```

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

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

```
countdog('this dog runs seeing other dog of dog gangs')
```

```
1
```

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. *

```
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(95,True)
```

```
'Big Ticket'
```

```
caught_speeding(72,False)
```

```
'Small 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.

```
from traitlets.config.loader import PyFileConfigLoader
print("SALARY EXPENDITURE")
name=str(input("EnterYour name:"))
basic=float(input("Enter Your Salary:"))
da=float(basic*0.25)
pf=float((basic+da)*0.12)
hr=float(basic*0.15)
ta=float(basic*0.09)
netpay=float(basic+da+hr+ta)
grosspay=float(netpay-pf)
print("\n\n")
print("S A L A R Y D E T A I L E D B R E A K U P")
print("========================================")
print("name of the Employee:",name)
print("Dearness Allow:",hr)
print("House Rent:",hr)
print("Travel allowance:",ta)
print("================================")
print("Net pay:",netpay)
print("provident Fund:",pf)
print("========================================")
print("Gross payment;",grosspay)
```

```
SALARY EXPENDITURE
EnterYour name:shamini b
Enter Your Salary:50000


S A L A R Y D E T A I L E D B R E A K U P
========================================
name of the Employee: shamini b
```

```
Dearness Allow: 7500.0
House Rent: 7500.0
Travel allowance: 4500.0
==================================
Net pay: 74500.0
provident Fund: 7500.0
=====================================
Gross payment; 67000.0
```

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):
  return(dict2.update(dict1))
```

```
dict1={'A':8,'B':10}
dict2={'C':9,'d':4}
print(Merge(dict1,dict2))
print(dict2)
```

```
None
{'C': 9, 'd': 4, 'A': 8, 'B': 10}
```

+ Code + Text

Colab paid products - Cancel contracts here

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