

Assignment- 3Python

AssignmentDate	22November2022
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MaximumMarks	2Marks

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="HithereSam!"
```

into a list.

```
s="Hi
```

```
thereSam".split()
```

```
lit()
```

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

```
s="Hi
```

```
there dad".split()
```

```
t()
```

```
['Hi', 'there', 'dad']
```

****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.

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

```
lst=[1,2,[3,4],[5,[100,200,['hello']],23,11],1,7]
lst[3][1][2][0]
```

'hello'

****Given this nested 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']}]}]}
d['k1'][3]['tricky'][3]['target'][3]
```

'hello'

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

#Mutability: One of the main differences between a tuple and a list is that a list is mutable, whereas a tuple is immutable.

****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')
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.****

```
def findDog(st):  
    return 'dog' in st.lower().split()  
findDog('Is there a 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 faster than the other dog dude!")
```

2

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, there is no ticket. If your speed is between 61 and 80 inclusive, the result is "Small ticket". If your 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 limit is 1 higher.***

birthday,yourspeedcanbe 5higher inallcases.*

```
def caught_speeding(speed,
    is_birthday):
    if is_birthday:
        speeding=speed-5
    else:
        speeding=speed
```

```
if speeding >
    80:
    return 'BigTicket'
elif
    speeding>60:
    return
    'SmallTicket'
else:
    return 'NoTicket'
```

```
caught_speeding(81,False)
'BigTicket'
```

```
caught_speeding(81,True)
'SmallTicket'
```

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

```
emp_list=['yuva,100,200,300,400,500','ajay,200,300,400,500,100','akhil,300,400,500,100,200','priya,400,500,100,200,300','deepa,500,100,200,300,400']
```

#retrieve values using for loop

```
for index in
    range(len(emp_list)):
    value=emp_list[index]
    print(index,value)
```

0yuva,100,200,300,400,500

1ajay,200,300,400,500,100

2 akhil,300,400,500,100,200
3priya,400,500,100,200,300
4deepa,500,100,200,300,400

#calculatetotalsalaryexpenditure

```
a=[]
n=input()for
iin
    emp_list:
    c=i.split()if
    c[0]==n:
        a.append(c[1:6])c.sort(ke
        y=lambdax:x)delc[-
        1]c=list(map(int,c))
        print(n+'totalsalaryexpenditure'+str(sum))
```

total salary expenditure

7500Createtwodictionariesin

Python:

**FirstonetotocontainfifieldsasEmpid,Empname,BasicpaySeconddicti
onary to contain fifields as Dept Name, DeptId.Combine
bothdictionaries.**

```
emp_1={'empid':1,'empname':'priya','basicpay':500000}emp_2={'deptn  
ame':'HR','deptid':88}
```

```
#combine two  
dictionariesprint(**emp_1  
,**emp_2})
```

```
{'empid':1,'empname':'priya','basicpay':500000,'deptname':'HR', 'deptid':88}
```

[Colabpaidproducts-Cancelcontracts
here](#)