Assignment date	07 November 2022
Student Name	Ms.R.Bharathi
Student Roll Number	821719106008
Maximum Marks	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?

```
In [ ]:  7**4
```

```
Out[ ]:  2401
```

Split this string:

s = "Hi there Sam!"

into a list.

```
In [ ]:  s="Hi there Sam!"
         X=s.split()
         print(X)
```

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

Given the variables:

planet = "Earth" diameter = 12742

Use .format() to print the following string:

In [ ]:
```python
planet="Earth"
diameter=12742
print("The diameter of '
```

The diameter of Earth is
12742 kilometers.

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

In [ ]:
```python
lst = [1,2,[3,4],[5,[100
```

In [ ]:
```python
lst = [1,2,[3,4],[5,[100
a=lst[3][1][2]
print(a)
```

['hello']

Given this nest dictionary
grab the word "hello".

In [ ]:
```python
d = {'k1':[1,2,3,{'trick
```

In [ ]:
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d = {'k1':[1,2,3,{'trick
print(d['k1'][3]["tricky
```

hello

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

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```
#TUPLE
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#The items in tuples are
#In tuple the implicatio
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#LIST
#The items in lists are
#Lists are mutable
#In list the implication
#Lists consume more memo
```

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('
```

```
domainGet('user@domain.c
```

'domain.com'

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

In [ ]:
```python
countDog('This dog runs
```

Out[ ]: 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, 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

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.

In [ ]:

```python
def findDog(st):
    if 'dog' in st.lower
        print("True")
    else:
        print("False")

st = "Is there a dog her
findDog(st)
```

True

In [ ]:

```python
findDog('Is there a dog
```

True

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

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.

In [ ]:
```python
def caught_speeding(spee

    if is_birthday:
        speeding = speec
    else:
        speeding = speec

    if speeding > 80:
        return 'Big Tick
    elif speeding > 60:
        return 'Small Ti
    else:
        return 'No Ticke
```