MACHINE LEARNING (CS-5710)

ASSIGNMENT - 2

Name: Neeraj Kumar Kajuluri

Student ID: 700742091

Git hub Link :- https://github.com/NeerajKumarKajuluri/ML-Assigment-2

Video Link: -
https://drive.google.com/file/d/1qIm1751AXoXbEvvXTOrZEOZ3B0tWYT84/view?usp=share_link

QUESTION 1

- Use a python code to display the following star pattern using the for loop.

Source code & Outputs

```
In [18]: for i in range(1,6):
             print("*"*i)
         for j in range(4,0,-1):
             print("*"*j)
```

```
*
**
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****
***
**
*
```

Question 2

- Use looping to output the elements from a provided list present at odd indexes.
- my list = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]

Source code & Output

```
In [21]: my_list=[10,20,30,40,50,60,70,80,90,100]
         for i in range(0,10,2):
             print(my_list[i])
```

```
10
30
50
70
90
```

Question 3

- Write a code that appends the type of elements from a given list. Input

  x = [23, ‘Python’, 23.98]

  Expected output

  [23, 'Python', 23.98]

  [<class 'int'>, <class 'str'>, <class ‘float'>]

Source code & Output

```
In [22]: x=[23,'Python',23.98]
         print(x)
         type_list=[]
         for i in x:
             type_list.append(type(i))
         print(type_list)

         [23, 'Python', 23.98]
         [<class 'int'>, <class 'str'>, <class 'float'>]
```

QUESTION 4

- Write a function that takes a list and returns a new list with unique items of the first list.

  Sample List: [1,2,3,3,3,3,4,5]

  Unique List: [1, 2, 3, 4, 5]

Source code & Output

```
In [24]: def unique(x):
             unique_list=[]
             for i in x:
                 if i not in unique_list:
                     unique_list.append(i)
             return unique_list
         sample_list=[1,2,3,3,3,4,5]
         print(unique(sample_list))

         [1, 2, 3, 4, 5]
```

QUESTION 5

- Write a function that accepts a string and calculate the number of upper-case letters and lower-case letters.

Input String: 'The quick Brow

Fox' Expected Output:

No. of Upper-case characters: 3

No. of Lower-case Characters: 12

Source code & Output

In [26]:
```
s=input("Enter your string: ")
upper_count=lower_count=0
for i in s:
    if i.isupper():
        upper_count+=1
    elif i.islower():
        lower_count+=1
print('No. Uppper-case characters:',upper_count)
print('No. Lower-case characters:',lower_count)
```

```
Enter your string: The quick Brow Fox
No. Uppper-case characters: 3
No. Lower-case characters: 12
```