Machine learning

Assignment-02

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Github link:https://github.com/puli1757/ML_Assignment2

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

```
star='*'
for i in range(1,6):
    for j in range(1,i):
            print("*",end=' ')
    print("\r")
for i in range(6,1,-1):
    for j in range(1,i):
        print("*",end=' ')
    print("\r")
```

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

```
[2] my_list = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]
    for i in my_list[1::2]:
        print(i,end=" ")
```

```
20 40 60 80 100
```

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'>]

```
x = [23, 'Python', 23.98]
types = []
for i in x:
    types.append(type(i))

print(x)
print(types)
```

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

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]

```
sample_List=[1,2,3,3,3,3,4,5]
unique_List=[]
for i in sample_List:
    if i not in unique_List:
        unique_List.append(i)
print(sample_List)
print(unique_List)
```

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

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

```
def count_case(string):
    upper_count = 0
    lower_count = 0
    for char in string:
        if char.isupper():
            upper_count += 1
        elif char.islower():
            lower_count += 1
    return upper_count, lower_count

input_string = 'The quick Brow Fox'
upper_count, lower_count = count_case(input_string)

print("No. of Upper-case characters:", upper_count)
print("No. of Lower-case Characters:", lower_count)
```

```
No. of Upper-case characters: 3
No. of Lower-case Characters: 12
```