MACHINE LEARNING IN CLASS EXCERCISE-1

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Github link:https://github.com/Swathijonna/Swathi_assignment/blob/main/Ml_ICE_700744259.ipynb

Question1:

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

```
r1 = int(input("Enter max number of stars in the line"))
for i in range (0, r1):#outer loop for rows
    for j in range(0, i + 1): #inner loop for columns
        print("* ", end='')
    print("\r")
for i in range (r1, 0, -1):
    for j in range(0, i -1):
        print("* ", end='')
    print("\r")
```

```
Enter max number of stars in the line5
*
* *
* * *
* * * *
* * * * *
* * * *
* * *
* *
*
```

Question2:

. 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]

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```
[22] list1 = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100] #declared the list
     for i in list1[1::2]: # declared the step size as 2
         print(i, end=" ")#elements in the odd position are displayed
```

```
20 40 60 80 100
```

Question3:

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] [, ,]

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```
[8]  x = [23, 'Python',23.98]#declared the list
     l = []# declared an empty list
     for i in range(len(x)):
         l.append(type(x[i]))#appends the type of elements in x to the list l
     print(x)
     print(l)
```

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

Question4:
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]

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```
[14] def uniquelist(l):#created the unique list function
       e = [] #created an empty list
       for i in l:#checks the elements in l
         if i not in e:#if element in l is not in e
           e.append(i)#appends the element into the list
       return e

     print(uniquelist([1,2,3,3,3,3,4,5]))
```

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

Question5:

```
def upperlower(s1): #creating the function
    d={"UPPERCASE":0, "lowercase":0}
    for ch in s1: # for every character in string
        if ch.isupper(): #checks upper
           d["UPPERCASE"]+=1
        elif ch.islower():#checks lower
           d["lowercase"]+=1
        else:
           pass
    print ("Original String : ", s1)
    print ("No. of Upper-case characters : ", d["UPPERCASE"])
    print ("No. of Lower-case Characters : ", d["lowercase"])

upperlower('The quick Brow Fox')
```

```
Original String :  The quick Brow Fox
No. of Upper-case characters :  3
No. of Lower-case Characters :  12
```