

Question 1: Given a Python list you should be able to display Python list in the following order

```
aLsit = [100, 200, 300, 400, 500]
```

Expected output:

```
[500, 400, 300, 200, 100]
```

In [5]:

```
list1 = [100, 200, 300, 400, 500]
list1.reverse()
print(list1)
```

```
[500, 400, 300, 200, 100]
```

Question 2: Concatenate two lists index-wise

```
list1 = ["M", "na", "i", "Ke"]
```

```
list2 = ["y", "me", "s", "lly"]
```

Expected output:

```
['My', 'name', 'is', 'Kelly']
```

In [59]:

```
list1 = ["M", "na", "i", "Ke"]
list2 = ["y", "me", "s", "lly"]
list3 = []
i=0
for row in list1:
    list3.append(list1[i]+list2[i])
    i=i+1

print(list3)
```

```
['My', 'name', 'is', 'Kelly']
```

Question 3: Given a Python list. Turn every item of a list into its square

```
aList = [1, 2, 3, 4, 5, 6, 7]
```

Expected output:

```
[1, 4, 9, 16, 25, 36, 49]
```

In [65]:

```
aList = [1, 2, 3, 4, 5, 6, 7]
aList2=[]
i=0
for row in aList:
    aList2.append(aList[i]**2)
    i=i+1
print(aList2)
```

[1, 4, 9, 16, 25, 36, 49]

In []:

Question 4: Concatenate two lists in the following order

```
list1 = ["Hello ", "take "]
```

```
list2 = ["Dear", "Sir"]
```

Expected output:

```
['Hello Dear', 'Hello Sir', 'take Dear', 'take Sir']
```

In [68]:

```
list1 = ["Hello ", "take "]
list2 = ["Dear", "Sir"]
list4=[]
i=0
j=0
for row in list1:
    for row in list2:
        list4.append(list1[i]+list2[j])
        j=j+1
    i=i+1
    j=0
print(list4)
```

['Hello Dear', 'Hello Sir', 'take Dear', 'take Sir']

In []:

Question 7: Add item 7000 after 6000 in the following Python List

```
list1 = [10, 20, [300, 400, [5000, 6000], 500], 30, 40]
```

Expected output:

```
[10, 20, [300, 400, [5000, 6000, 7000], 500], 30, 40]
```

In [96]:

```
list1 = [10, 20, [300, 400, [5000, 6000], 500], 30, 40]
list1[2][2].insert(2,7000)
print(list1)
```

```
[10, 20, [300, 400, [5000, 6000, 7000], 500], 30, 40]
```

In []:

Question 8: Given a nested list extend it with adding sub list ["h", "i", "j"] in a such a
Given List:

```
list1 = ["a", "b", ["c", ["d", "e", ["f", "g"], "k"], "l"], "m", "n"]
```

```
Sub List to be added = ["h", "i", "j"]
```

Expected output:

```
['a', 'b', ['c', ['d', 'e', ['f', 'g', 'h', 'i', 'j'], 'k'], 'l'], 'm', 'n']
```

In [106]:

```
list1 = ["a", "b", ["c", ["d", "e", ["f", "g"], "k"], "l"], "m", "n"]
list2 = ["h", "i", "j"]
p=2
l=0
for row in list2:
    list1[2][1][2].insert(p,list2[l])
    p=p+1
    l=l+1
print(list1)
```

```
['a', 'b', ['c', ['d', 'e', ['f', 'g', 'h', 'i', 'j'], 'k'], 'l'], 'm', 'n']
```

In []:

In []:

```
# you code
```

In []:

In []:

```
# you code
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In []:

In []:

```
# you code
```

In []: