In [2]:
```
list1=[100,200,300,500]
print(list1[::-1])
```

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

In [6]:
```
# Write a program to add two lists index-wise. Create a new list that contains the 0th index item from both the list,
# then the 1st index item, and so on till the last element. any leftover items will get added at the end of the new list.

list1 = ["M", "na", "i", "Ke"]
list2 = ["y", "me", "s", "lly"]
list3=[i+j for i,j in zip(list1,list2)]

print(list3)
```

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

In [8]:
```
#Given a list of numbers. write a program to turn every item of a list into its square.

numbers = [1, 2, 3, 4, 5, 6, 7]
square=[]
for i in numbers:
    square=(i*i)
    print(square)
```

```
1
4
9
16
25
36
49
```

In [12]:
```
#Concatenate two lists in the following order

list1 = ["Hello ", "take "]
list2 = ["Dear", "Sir"]
list4=[list1+list2]
list3=[i+j for i in list1 for j in list2]
print(list3)
print(list4)
```

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

In [13]:
```
#Given a two Python list. Write a program to iterate both lists simultaneously and display items
#from list1 in original order and items from list2 in reverse order.

list1 = [10, 20, 30, 40]
list2 = [100, 200, 300, 400]

for i,j in zip(list1,list2[::-1]):
    print(i,j)
```

```
10 400
20 300
30 200
40 100
```

In [17]:
```
#Remove empty strings from the list of strings

list1 = ["Mike", "", "Emma", "Kelly", "", "Brad"]

res=list(filter(None, list1))
print(res)
```

```
['Mike', 'Emma', 'Kelly', 'Brad']
```

In [21]:
```
#Write a program to add item 7000 after 6000 in the following Python List

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

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

In [26]:
```
#You have given a nested list. Write a program to extend it
#by adding the sublist ["h", "i", "j"] in such a way that it will look like the following list.

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

# sub list to add
sub_list = ["h", "i", "j"]

(list1[2][1][2].extend(sub_list))
print(list1)
```

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

In [29]:
```
#You have given a Python list. Write a program to find value 20 in the list, and if it is present,
#replace it with 200. Only update the first occurrence of an item.
list1 = [5, 10, 15, 20, 25, 50, 20]

index=list1.index(20)
list1[index]=200
print(list1)
```

```
[5, 10, 15, 200, 25, 50, 20]
```