1.Reverse a list in Python.

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

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

3. Turn every item of a list into its square

```
numbers = [1, 2, 3, 4, 5, 6, 7]
res = [ ]
for i in numbers:
    res.append(i * i)
print(res)
```
#[1, 4, 9, 16, 25, 36, 49]

OR Using comprehensions

```
numbers = [1, 2, 3, 4, 5, 6, 7]
res = [x * x  for x in numbers]
print(res)
```

5. Iterate both lists simultaneously

```
list1 = [10, 20, 30, 40]
list2 = [100, 200, 300, 400]
for x, y in zip(list1, list2[: :]):
  print(x, y)
```

 # 10 100
20 200
30 300
40 400

2. Concatenate two lists index-wise

```
 list1 = ["M", "na", "i", "Za"]
  list2 = ["y", "me", "s", "mir"]
  list3 = [i + j  for i, j  in zip (list1, list2)]
  print(list3)
```
 # ['My', 'name', 'is', 'Zamir']

4. Concatenate two lists in the following order

```
list1 = ["Hello ", "take "]
list2 = ["Dear", "Sir"]
res = [x + y for x in list1 for y in list2]
print(res)
```

 # ['Hello Dear', 'Hello Sir', 'take Dear', 'take Sir']
OR
```
res_list = []
for i in range(len(list1)):
    for j in range(len(list2)):
        res_list.append(list1[i]+ " " + list2[j])

print(res_list)
```

6. Iterate both lists simultaneously

```
list1 = [10, 20, 30, 40]
list2 = [100, 200, 300, 400]
for x, y in zip(list1, list2[: : -1]):
  print(x, y)
```

 # 10 400
20 300
30 200
40 100

7. Remove empty strings from the list of strings

```
list1 = ["Vijay", "", "Karthik", "Ajay", " ", "Bharat"]
res = list (filter (None, list1))
print(res)


# ["Vijay", "Karthik", "Ajay", "Bharat"]
```

9. Remove all occurrences of a specific item from a list

```
list1 = [1, 2, 3, 4, 1, 5, 6, 1, 7]
res = [i  for i in list1 if i != 1]
print(res)
#[2, 3, 4, 5, 6, 7]
```

OR Using Function

```
def rem_val (list2, val):
    return [i  for i in list1 if i != val]
list1 = [1, 2, 3, 4, 1, 5, 6, 1, 7]
res = rem_val (list1, 1)
print(res)
#[2, 3, 4, 5, 6, 7]
```

11.Python program to find the largest number in a list

```
list1 = [3,8,1, 7,2,9,5,4]
big = list1[0]
pos= 0
for i in range(1, len(list1)):
    if (list1[i]>big):
        big = list1[i]
        pos= i
print("largest element is ",  big  "at",  pos, "position")
# largest element is 9 at 5 position
```

8. Remove empty strings from the list of strings

```
list1 = ["Vijay", "", "Karthik", "Ajay", " ", "Bharat"]

for i in list1:
    if not i:
        list1.remove(i)
print(list1)


#["Vijay", "Karthik", "Ajay", "Bharat"]
```

10. Remove all occurrences of a specific item from a list using remove function

```
list1 = [1, 2, 3, 4, 1, 5, 6, 1, 7]

while 1 in list1:
    list1.remove(1)
print(list1)


#[2, 3, 4, 5, 6, 7]
```

12.Python program to find count of odd numbers in list

```
list1 = [8,3,1,6,2,4,5,9]
count = 0
for i in range (len (list1)):
    if (list1[i] %2 != 0):
        count = count+1
print("The number of odd numbers in the list are: ", count)
```