

Today we practice numbers based list codes

1. Reverse the numbers:

```
numbers =  
[1,2,3,4,5,6,7] left= 0  
right= len(numbers)-1  
while left<right:  
    numbers[left],numbers[right] =  
numbers[right],numbers[left]      left+=1      right-=1  
print(numbers)
```

2. Find odd and even number count:

```
numbers = [1,2,3,4,5,6,7]  
#find the even or odd and its numbers of  
count even_count =odd_count = 0 for num in  
numbers: if num%2==0:  
    even_count+=1  
else:  
    odd_count+=1  
print(f"total even  
numbers:{even_count}") print(f"total odd  
numbers:{odd_count}")
```

3. Find largest and smallest number in list:

```
numbers = [1,2,3,4,5,6,7,8] largest  
= smallest = numbers[3]  
for num in numbers:  
if num>largest:  
largest = num elif  
num<smallest:  
smallest = num  
  
print(f"largest number is {largest}")  
print(f"smallest number is {smallest}")
```

4. Move all zeros into end:

```
nums = [0,1,0,4,0,5,12,0]
pos = 0 for n in
nums:    if n!= 0:
nums[pos]= n
pos+=1 while
pos<len(nums):
    nums[pos] =0
pos+=1 print(nums)
```

5.Frequency count

```
nums = [1, 2, 2, 3, 3, 3]
freq = {}
for n in
nums:
    freq[n] = freq.get(n, 0) + 1
print(freq)
```

6.Remove the duplicate:

```
nums = [1, 2, 2, 3, 4, 4, 5] unique
= []
for n in nums:    if
n not in unique:
unique.append(n)
print(unique)
```