```python
# Q4
a=[12,23,4,5,87,98,22]
max(a)
```

98

```python
my_list=[12,23,4,5,87,98,22]
my_list[0],my_list[-1]=my_list[-1],my_list[0]
# swapp_list=swap_first_last(my_list)
print(my_list)
```

[22, 23, 4, 5, 87, 98, 12]

```python
x=[2,3,5,76,98,7,62]
temp=x[2]
x[2]=x[5]
x[5]=temp
print(x)
```

[2, 3, 7, 76, 98, 5, 62]

```python
z=[2,3,5,76,98,7,62]
z.reverse()
print(z)
```

[62, 7, 98, 76, 5, 3, 2]

```python
z=[2,7,5,76,98,7,62,8,31,7]
z.count(7)
```

3

```python
z=[2,7,5,76,98,7,62,8,31,7]
y=sum(a)
print(y)
```

251

```python
z=[2,7,11,98,5,62,8,31]
for i in z:
    print(i**2)
```

4
49
5776
9604
25
3844
64
961

```python
z=[2,7,11,98,5,62,8,31]
y= len(z)
print(y)
```

8

```python
my_list = [101,978,454, 201, 301,323,687, 401, 501]

smallest = my_list[0]
largest = my_list[0]

for n in my_list:
    if n < smallest:
        smallest = n
    if n > largest:
        largest = n

print("Smallest number:", smallest)
print("Largest number:", largest)
```

Smallest number: 101
Largest number: 978

```python
radius= int(input("Enter a radius of circle:"))
pi=3.14
area=pi*radius*radius
print(f"The area of the circle is: {area}")
```

Enter a radius of circle: 5

The area of the circle is: 78.5

```python
even_no=[]
odd_no=[]
for i in range(0,151):
    if i % 2 == 1:
        odd_no .append(i)
    else:
        even_no.append(i)

print("Odd number Between:",odd_no)
print("Even number Between:",even_no)
```

Odd number Between: [1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125, 127, 129, 131, 133, 135, 137, 139, 141, 143, 145, 147, 149]
Even number Between: [0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92,

```
94, 96, 98, 100, 102, 104, 106, 108, 110, 112, 114, 116, 118, 120,
122, 124, 126, 128, 130, 132, 134, 136, 138, 140, 142, 144, 146, 148,
150]

my_list=[1,23,32,64,69,78,98,90,80,94,101,86,54,34,23,13,19,30]
even_count=0
odd_count=0
for i in my_list:
    if i % 2 == 1:
        odd_count+=1
    else:
        even_count+=1
print("odd No.count:",odd_count)
print("even No count:",even_count)

odd No.count: 7
even No count: 11

div_by_4=[]
div_by_6=[]
div_by_8=[]
div_by_10=[]
div_by_3=[]
div_by_5=[]
div_by_7=[]
div_by_9=[]
for i in range(0,151+1):
    if i % 4==0:
        div_by_4.append(i)
    if i % 6 ==0:
        div_by_6.append(i)
    if i % 8==0:
        div_by_8.append(i)
    if i % 10 ==0:
        div_by_10.append(i)
    if i % 3==0:
        div_by_3.append(i)
    if i % 5==0:
        div_by_5.append(i)
    if i % 7==0:
        div_by_7.append(i)
    if i % 9==0:
        div_by_9.append(i)

print("Number of divisible by 4:",div_by_4)
print()
print("Number of divisible by 6:",div_by_6)
print()
print("Number of divisible by 8:",div_by_8)
print()
```

```python
print("Number of divisible by 10:",div_by_10)
print()
print("Number of divisible by 3:",div_by_3)
print()
print("Number of divisible by 5:",div_by_5)
print()
print("Number of divisible by 7:",div_by_7)
print()
print("Number of divisible by 9:",div_by_9)
```

Number of divisible by 4: [0, 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, 84, 88, 92, 96, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 148]

Number of divisible by 6: [0, 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84, 90, 96, 102, 108, 114, 120, 126, 132, 138, 144, 150]

Number of divisible by 8: [0, 8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96, 104, 112, 120, 128, 136, 144]

Number of divisible by 10: [0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150]

Number of divisible by 3: [0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 63, 66, 69, 72, 75, 78, 81, 84, 87, 90, 93, 96, 99, 102, 105, 108, 111, 114, 117, 120, 123, 126, 129, 132, 135, 138, 141, 144, 147, 150]

Number of divisible by 5: [0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105, 110, 115, 120, 125, 130, 135, 140, 145, 150]

Number of divisible by 7: [0, 7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77, 84, 91, 98, 105, 112, 119, 126, 133, 140, 147]

Number of divisible by 9: [0, 9, 18, 27, 36, 45, 54, 63, 72, 81, 90, 99, 108, 117, 126, 135, 144]

```python
My_list=[11,"Tableau",23,89.3,"Power bi ",53.62,"Excel",44,69.17]

integers =[]
strings=[]
floats=[]

for i in My_list:
    if isinstance(i,int):
        integers.append(i)
    elif isinstance(i,str):
        strings.append(i)
    else:
        floats.append(i)
```

```python
print("Integers:",integers)
print("String:",strings)
print("Floats:", floats)

Integers: [11, 23, 44]
String: ['Tableau', 'Power bi ', 'Excel']
Floats: [89.3, 53.62, 69.17]

list1=[2,65,77,80]
list2=[65,8,70,98]
list1.extend(list2)
print("List 1:",list1)

List 1: [2, 65, 77, 80, 65, 8, 70, 98]

list1=[2,65,43,57,98]

list1.sort(reverse=True)

list2=list1[2]

print(list2)

57

'''lst=[2,2,2,6,6,6,6,5,5,5,1,3,3,3,3]
element=set(lst)
frequency=[]
for i in element:
    #frequency(i)==frequency
print()'''

'lst=[2,2,2,6,6,6,6,5,5,5,1,3,3,3,3]\nelement=set(lst)\nfrequency=[]\
nfor i in element:\n    #frequency(i)==frequency\nprint()'

a=[23,4,54,56,7,90,44,58,77,98]
length=len(a)
print(length)

10

my_list=[]
if len(my_list)==0:
    print("list is Empty")
else:
    print("list is not Empty")

list is Empty

lst1=[23,34,65,87]
lst2=[21,46,97,87]
```

```
a=lst1+lst2
print(a)

[23, 34, 65, 87, 21, 46, 97, 87]

a=[1,2,2,3,3,4,1,2,1,5]
occurrences = a.count(2)
print(occurrences)

3

my_list = [[1, 2], [3, 4], [5, 6]]
flattened_list = []      # convert list of list into single list.
for lst in my_list :
    for item in lst:
        flattened_list.append(item)
print(flattened_list)

[1, 2, 3, 4, 5, 6]

lst=[11,33,55]
result = int("".join(map(str, lst)))
print(result)

113355
```