

## List Q&A

**Q1.** ISBN-10 identifiers are ten digits long. The first nine characters are digits 0-9. The last digit can be 0-9 or X, to indicate a value of 10. An ISBN-10 number is valid if the sum of the digits multiplied by their position modulo 11 equals zero.

**For example:**

ISBN : 1 1 1 2 2 2 3 3 3 9

position : 1 2 3 4 5 6 7 8 9 10

This is a valid ISBN, because:

$$(1*1 + 1*2 + 1*3 + 2*4 + 2*5 + 2*6 + 3*7 + 3*8 + 3*9 + 9*10) \% 11 = 0$$

**Examples**

1112223339 --> true

111222333 --> false

```
In [ ]: x = input('>>>')
total = 0
for i in range(len(x)):
    total = total + (int(x[i])*(i+1))
print(total%11)
```

**Q2.** Write python Program to find sum of list.

Example:

input:

x = [2,3,4,5,6,7,8,5,4]

output:

44

```
In [ ]: x = [2,3,4,5,6,7,8,5,4]
kk = 0
for i in x:
    kk = kk+i
kk
```

**Q3.** Write python Program to find index wise sum of two list.

Example:

input:

x = [2,3,4,5,6,7,8,5,4]

y = [5,4,3,3,4,5,6,6,8]

output:

[7, 7, 7, 8, 10, 12, 14, 11, 12]

```
In [ ]: x = [2,3,4,5,6,7,8,5,4]
y = [5,4,3,3,4,5,6,6,8]

num = []
for i,j in zip(x,y):
    num.append(i+j)
num
```

**Q4.** Write python Program to find sum of all number from list.

**Example:**

input:

```
x = [2,3,4,'23','A',5,6,'B',7,'6',8,'9',5,4]
```

output:

```
82
```

```
In [ ]: x = [2,3,4,'23','A',5,6,'B',7,'6',8,'9',5,4]
k = 0
for i in x:
    if type(i)==int:
        k = k + i
    elif type(i)==str:
        if i.isnumeric():
            k= k+int(i)
k
```

**Q5** Write Python Program to find maximum,minimum values from list.

**Example:**

Input:

```
num = [2,3,4,5,6,76,7,4]
```

Output:

```
minimum: 2
maximum: 76
```

```
In [ ]: num = [2,3,4,5,6,76,7,4]
maximum = num[0]
minimum = num[0]
for x in num:
    if x>maximum:
        maximum = x

for i in num:
    if i<minimum:
        minimum = i
print('minimum:',minimum)
print('maximum:',maximum)
```

**Q6** Write Python Program to find maximum,minimum values from list.

**Example:**

Input:

```
num = [2,3,4,'A',5,6,'B',76,'Py',7,4,45]
```

Output:

```
minimum: 2
maximum: 76
```

```
In [ ]: num = [2,3,4,'A',5,6,'B',76,'Py',7,4,45j]
maximum = num[0]
minimum = num[0]
for x in num:
    if type(x)==int and x>maximum:
        maximum = x

for i in num:
    if type(i)==int and i<minimum:
        minimum = i
print('minimum:',minimum)
print('maximum:',maximum)
```

**Q7** Write Python Program to find Sort values from list.

**Example:**

Input:

```
num = [2,3,4,'A',5,6,'B',76,'Py',7,4,45j]
```

Output:

```
[2, 3, 4, 5, 6, 76, 7, 4]
```

```
In [ ]: num = [2,3,4,'A',5,6,'B',76,'Py',7,4,45j]
num2 = []
for i in num:
    if type(i)==int:
        num2.append(i)
sort_values = []
while num2:
    mimimum = num2[0]
    for i in num2:
        if i<mimimum:
            minimum = i
    sort_values.append(mimimum)
    num2.remove(mimimum)
print(sort_values)
```

**Q8.** Write the python program to find duplicate values from list.

**Example**

**Input:**

```
num = [3,4,5,6,7,6,54,'Hello',45j,4.3,'Hello','3',7]
```

**Output:**

```
[3,6,7,'Hello']
```

```
In [ ]: num = [3,4,5,6,7,6,54,'Hello',45j,4.3,'Hello','3',7]
kk = []
for i in num:
    if i not in kk:
        kk.append(i)
kk
```

In [ ]: