Practice 6 Repetition + List

1. Given a list of numbers, find and print the frequency of each number [You may place -1 for multiple occurrences of same number in the list, so that same number may not be printed again]. See sample output:

```
23 3 times
18 2 times
...
```

2. Given a list of numbers, find number with highest frequency (most repeated) and print number and its frequency. See sample output:

```
40 5 times
```

Use following code in next problems

```
def display(x):
    for i in range(5):
        for j in range(5):
            print(x[i][j],end=' ')
        print()

def task2():
    x=[[r.randint(11,99) for i in range(5)] for j in range(5)]
    display(x)

task2()
```

3. Print principal diagonal in diagonal pattern. See sample output:

```
98 62 66 40 90
59 79 31 38 92
70 72 48 50 29
97 17 72 53 41
66 22 36 36 50
--------------
98
   79
      48
         53
            50
```

4. Print upper triangle of the list. See sample output:

```
71 13 88 96 81
40 36 77 59 60
71 90 50 75 40
30 30 17 90 13
35 57 41 57 11
--------------
71 13 88 96 81
   36 77 59 60
      50 75 40
         90 13
            11
```

5. Print lower triangle of the list. See sample output:

```
71 13 88 96 81
40 36 77 59 60
71 90 50 75 40
30 30 17 90 13
35 57 41 57 11
--------------
71 13 88 96 81
40 36 77 59
```

```
71 90 50
30 30
35
```

6. Find highest element and its index in each row. Print both of them for row:

```
71 13 88 96 81
40 36 77 59 60
71 90 50 75 40
30 30 17 90 13
35 57 41 57 11
--------------
Row 1: 96 is at index 3
Row 2: 77 is at index 2
...
```

7. Print row sum in front of each row:

```
78 70 15 54 26    Sum = 243
68 27 61 28 14    Sum = 198
46 64 58 47 77    Sum = 292
81 22 79 31 41    Sum = 254
88 36 35 85 46    Sum = 290
```

8. Print column sum in the last line. Use a separate list for column sum and separate loop to print the sum:

```
63  70  88  37  63
47  77  38  80  45
32  86  38  17  12
91  92  47  57  62
13  22  39  28  84
246 347 250 219 266
```