

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