Assignment - List

1. Heights Statistics

- 1. Ask user to input the heights value (in centimeter) of 5 students. The entered values are integer.
- Display lowest, highest, and average height value of these 5 students.

Sample output:

```
Number of heights to be entered: 4

100

120

110

130

[100, 120, 110, 130]

min = 100, max = 130, average = 115.0
```

```
In [2]: heights = []

n = int(input("Number of heights to be entered: "))
for x in range(n):
    h = int(input())
    heights.append(h)

print(heights)
mi = min(heights)
ma = max(heights)
avg = sum(heights)/len(heights)
print("min = {}, max = {}, average = {}".format(mi, ma, avg))
```

```
Number of heights to be entered: 4

100

110

120

130

[100, 110, 120, 130]

min = 100, max = 130, average = 115.0
```

```
In [ ]: n = int(input('Number of heights to be entered: '))

i = 0
raw = []
while i <n :
    x = int(input())
    raw.append(x)
    i = i + 1

print(raw)
print('min = {}, max = {}, average = {}'.format(min(raw), max(raw), sum(raw)/lend)</pre>
```

2.

Following are the list of marks of a subject. Find the list of marks which are above or equals to 50 and display them in descending order.

```
marks = [46, 41, 74, 53, 31, 39, 49, 57, 76, 80, 78, 38, 31, 56, 98, 55, 41, 73, 23, 88]
```

```
In [8]: passed = []
marks = [46, 41, 74, 53, 31, 39, 49, 57, 76, 80, 78, 38, 31, 56, 98, 55, 41, 73,

for m in marks:
    if m >= 50:
        passed.append(m)

passed.sort(reverse=True)
print(passed)
```

```
[98, 88, 80, 78, 76, 74, 73, 57, 56, 55, 53]
```

```
In [11]: marks = [46, 41, 74, 53, 31, 39, 49, 57, 76, 80, 78, 38, 31, 56, 98, 55, 41, 73,
    result = list(filter(lambda x: x>=50, marks))
    result.sort(reverse=True)
    print(result)
```

```
[98, 88, 80, 78, 76, 74, 73, 57, 56, 55, 53]
```