Challenge 3: Find k largest elements in the List

If you are given a list and any number "k", can you write a code to find first "k" largest elements using Max-Heap?

We'll cover the following

Problem Statement

Implement a function `findKLargest(lst,k)` that takes an unsorted integer list as input and returns the k largest elements in the list using a Max Heap. The `maxHeap` class that was written in a previous lesson (https://www.educative.io/collection/page/5642554087309312/5634727314718720/5161164958859264/) is prepended in this exercise so feel free to use it! Have a look at the illustration given for a clearer picture of the problem. Implement a function `findKlargest()` which takes a list as input and finds the “k” largest elements in the list using a Max-Heap. An illustration is also provided for your understanding.

Output:

Returns integer list containing first k largest elements from *my_list*

Sample Input

```
lst = [9,4,7,1,-2,6,5]
k = 3
```

Sample Output

```
[9,7,6]
```

Explanation

As “k” is 3, so we need to find the top 3 maximum elements from the given list. 9 is the largest value in the list, while 7 is the second maximum, and 6 is the third max.

Coding Exercise

Take a close look and design a step-by-step algorithm first before jumping on implementation. This problem is designed for your practice, so try to solve it on your own first. If you get stuck, you can always refer to the solution provided in the solution section. Good Luck!

main.py

MaxHeap.py

```
1  from MaxHeap import MaxHeap
2
3
4  def findKLargest(lst, k):
5      # Write your code here
6      pass
7
```


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