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A

Name:	ID:	Section:

Question 1 [15 Points]

You are given an **array of integers** and values of `x` and `y`. You need to create a new heap consisting of the numbers between **x**th lowest position and **y**th lowest position from the array.

Note:

1. **You need to figure out which heap to use.**
2. You are not allowed to use any **direct sorting, searching on the array.**
3. You are not allowed to use any built-in functions except **len()**
4. You can assume **insert()** and **swim()** functions are **already implemented. You have to implement whatever else is needed.**

Sample Input:	Sample Output:
array = [11, 15, 8, 2, 31, 23] x = 2 y = 5	result = [8, 11, 15, 23]
Explanation:	

When the array is sorted [2, 8, 11, 15, 23, 31] the values are in lowest to highest order. For each position of n we can say, If:-
 	
n = 1, Position-1 : 2 (1-st lowest)
n = 2, Position-2:   8 (2-nd lowest)
… … … … … … …
n = 5, Position-5: 23 (5-th lowest)
n = 6, Position-6: 31 (6-th lowest)
	Here,
	     x = 2, 2-nd lowest: 8
	     y = 5, 5-th lowest: 23
	
	Numbers between 2nd and 5th lowest in the given array are: **8, 11, 15, 23.**
	So the new heap will have these values.