Name:	ID:	Section:

Question 1 [15 Points]

You are given an **array of integers** and a **number k**. Your task is to find the **product of top k lowest** elements from the list.

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] k = 3	product = 176
Explanation:	
The array is [11, 15, 8, 2, 31, 23] and the top k lowest elements are [2, 8, 11]. So the product will be 2*8*11 = 176	