

Lab Goal : This lab was designed to teach you more about priority queues.

Lab Description : Given an array, reduce the array to a single value with the minimum cost. You must use a PriorityQueue.

Given array 1,2,3

Add all values to a priority queue

Get the 2 smallest values and add their sum back to the pq

The queue would contain 3,3

Get the 2 smallest values and add their sum back to the pq

The queue would contain 6

The loop stops when the pq has a single value

The min cost would be 9

Sample Data :

```
212  
25,10,20  
1,2,3  
1,2,3,4,7,22,33,54,-66,3,4,5,76,7,999  
1,1,1,1,1  
1,1
```

Sample Output :

```
0  
85  
9  
947  
12  
2
```

Files Needed ::

```
ArrayReduction.java
```