

## 1 Min-nie Mouse and Max-xie Mouse

Use or modify a data structure or set of data structures to do the following operations in the provided time:

- insert:  $O(\log(N))$
- getSmallest:  $O(1)$
- getLargest:  $O(1)$
- deleteSmallest:  $O(\log(N))$
- deleteLargest:  $O(\log(N))$