# 295. Find Median from Data Stream

## SOLUTION IN JAVA

class MedianFinder {

public void addNum(int num) {

if (maxHeap.isEmpty() || num <= maxHeap.peek())

maxHeap.offer(num);

else

minHeap.offer(num);

if (maxHeap.size() < minHeap.size())

maxHeap.offer(minHeap.poll());

else if (maxHeap.size() - minHeap.size() > 1)

minHeap.offer(maxHeap.poll());

}

public double findMedian() {

if (maxHeap.size() == minHeap.size())

return (double) (maxHeap.peek() + minHeap.peek()) / 2.0;

return (double) maxHeap.peek();

}

private Queue<Integer> maxHeap = new PriorityQueue<>(Collections.reverseOrder());

private Queue<Integer> minHeap = new PriorityQueue<>();

}