class MedianFinder {

public:

/\*\* initialize your data structure here. \*/

MedianFinder() {}

void addNum(int num) {

(left.empty() || num <= left.top()) ? left.push(num) : right.push(num);

if(left.size() > right.size() + 1){

right.push(left.top());

left.pop();

}

if(right.size() > left.size()){

left.push(right.top());

right.pop();

}

}

double findMedian() {

return left.size() > right.size()? left.top() : (left.top() + right.top()) / 2.0;

}

private:

priority\_queue<int>left;

priority\_queue<int, vector<int>, greater<int>>right;

};