```
1 class Solution {
public:
       int halveArray(vector<int>& nums) {
           priority_queue<double> pq;
5
           double sum = 0;
          int step = 0;
           for(auto& s : nums)
           {
               pq.push(s);
9
               sum += s;
10
           }
11
           sum /= 2.0;
12
           while(sum > 0)
13
           {
14
               double tmp = pq.top();
15
               pq.pop();
16
               pq.push(tmp/2);
17
               sum -= tmp/2;
18
               step++;
19
20
           return step;
      }
22
23 };
```