class Solution {

public:

int n;

vector <int> v;

Solution(vector<int>& w) {

srand(time(NULL));

n = w[0];

for(int i = 1; i < w.size(); i++){

w[i] += w[i - 1];

n = w[i];

}

v = w;

}

int pickIndex() {

return upper\_bound(v.begin(), v.end(), rand() % v.back()) - v.begin();

}

};