```cpp
#include <bits/stdc++.h>
using namespace std;
int w;
vector<int> car;
int dp[10001][10001];
int solve(int current,int s1,int s2){
    if(current>=car.size())return dp[s1][s2] = 0LL;

    if(dp[s1][s2]!=-1) return dp[s1][s2];

    int ans = 0;
    if(car[current]+s1 <= w)
        ans = max(solve(current+1,s1+car[current],s2)+1,ans);
    if(car[current]+s2 <= w)
        ans = max(solve(current+1,s1,s2+car[current])+1,ans);

    return dp[s1][s2] = ans;
}
void print(int current, int s1, int s2){


    if(current>=car.size()) return;
    if(s1+car[current] <=w and dp[s1][s2] - 1 == dp[s1+car[current]][s2]){
        printf("port\n");
        print(current+1,s1+car[current],s2);
    }
    else if(s2+car[current] <=w and dp[s1][s2]-1 == dp[s1][s2+car[current]]){
        printf("starboard\n");
        print(current+1,s1,s2+car[current]);
    }

}
main(){
    int n,aux;
    scanf("%d",&n);
    for(int k=0;k<n;k++){
        scanf("%d",&w);
        w*=100;
        while(scanf("%d",&aux) and aux){
            car.push back(aux);
        }
        memset(dp,-1,sizeof dp);
        printf("%d\n",solve(0,0,0));

        print(0,0,0);
        car.clear();
        if(k<n-1)
            puts("");
    }
}

```