```cpp
#include <cstdio>
#include <vector>

using namespace std;

vector<int> moves;

void printAnswer() {
    for(int m: moves)
        printf("%d\n", m);
}

int M, N, T;

int search(int d[101][41], int t, int n) {
    if(d[t][n] == 1)
        return 0;
    else if(d[t][n] == 0 && t == T) {
        return 1;
    }

    int success = 0;
    if(n > 1) {
        moves.push_back(1);
        success = search(d, t+1, n-1);
        if(success == 0)
            moves.pop_back();
        else
            return 1;
    }
    if(success == 0) {
        moves.push_back(3);
        success = search(d, t+1, n);
        if(success == 0)
            moves.pop_back();
        else
            return 1;
    }
    if(success == 0 && n < M) {
        moves.push_back(2);
        success = search(d, t+1, n+1);
        if(success == 0)
            moves.pop_back();
        else
            return 1;
    }
    return success;
}

int main() {
    scanf("%d%d%d", &M, &N, &T);
    int d[101][41];
    for(int t = 1; t <= T; ++t) {
        for(int m = 1; m <= M; ++m) {
            scanf("%d", &d[t][m]);
        }
    }
    for(int m = 1; m <= M; ++m) {
        d[0][m] = 0;
    }

    int success = search(d, 0, N);
    printAnswer();

    return 0;
}

/**
7
5
5
0 0 0 0 0 0 0
0 0 0 0 0 0 0
```

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0 0 0 0 0 0 0
0 1 1 0 0 0 0
1 0 1 1 1 1 1
*/
```