

1932A - Thorns and Coins

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1 Problem

Problem Description : <https://codeforces.com/problemset/problem/1932/A>

2 Objective

The objective is to find the maximum number of coins that can be collected while traversing a path with thorns and coins. The path can be traversed by moving one or two cells at a time, but thorny cells cannot be stepped on.

3 Solution

Iterate through the path. For each cell: 1. If the cell contains a coin ('@'), increment the count of collected coins. 2. If the cell contains thorns ('*'), check the next cell. If it also contains thorns, break the loop since it's not possible to proceed further without stepping on thorns.

4 Code

```
#include <bits/stdc++.h>
#define fastio ios_base::sync_with_stdio(false); cin.tie(NULL);
using namespace std;

int solve(char path[], int n) {
    int ans = 0;
    for(int i = 0; i < n; i++){
        if(path[i]=='@') ans++;
        else if (path[i]=='*'){
            if(path[i+1]=='*') break;
        }
    }
    return ans;
}

int main(){
    fastio;
    int t;
    cin >> t;

    while(t--){
        int n;
        cin >> n;
        char path[n];
        for(int i = 0; i < n; i++){
            cin >> path[i];
        }
        cout << solve(path, n) << endl;
    }

    return 0;
}
```