Lost Marbles

Program Name: marbles.cpp   Input File: marbles.dat

A particular game show has a bonus round in which marbles are dropped in the triangular maze seen in Figure 1. The maze consists of tubes with joints that guide the marble. The 21 joints each contain a deflector that pivots. The positions of the pivots are set based on the contestant's answers to questions and pivot selections. The marble starts at the top of the triangle and, when the marble arrives at a pivot, the pivot's position either deflects the marble to the left or to the right. For example, as the marble arrives at pivot position 8, if pivot 8 is set to the left, the marble will next travel to pivot position 12. The marble will eventually drop out of the maze into one of the bins (A through G) and the contestant will win one of the prize amounts ($100, $500, $1000, or $5000) associated with the bins (as seen in Figure 1).

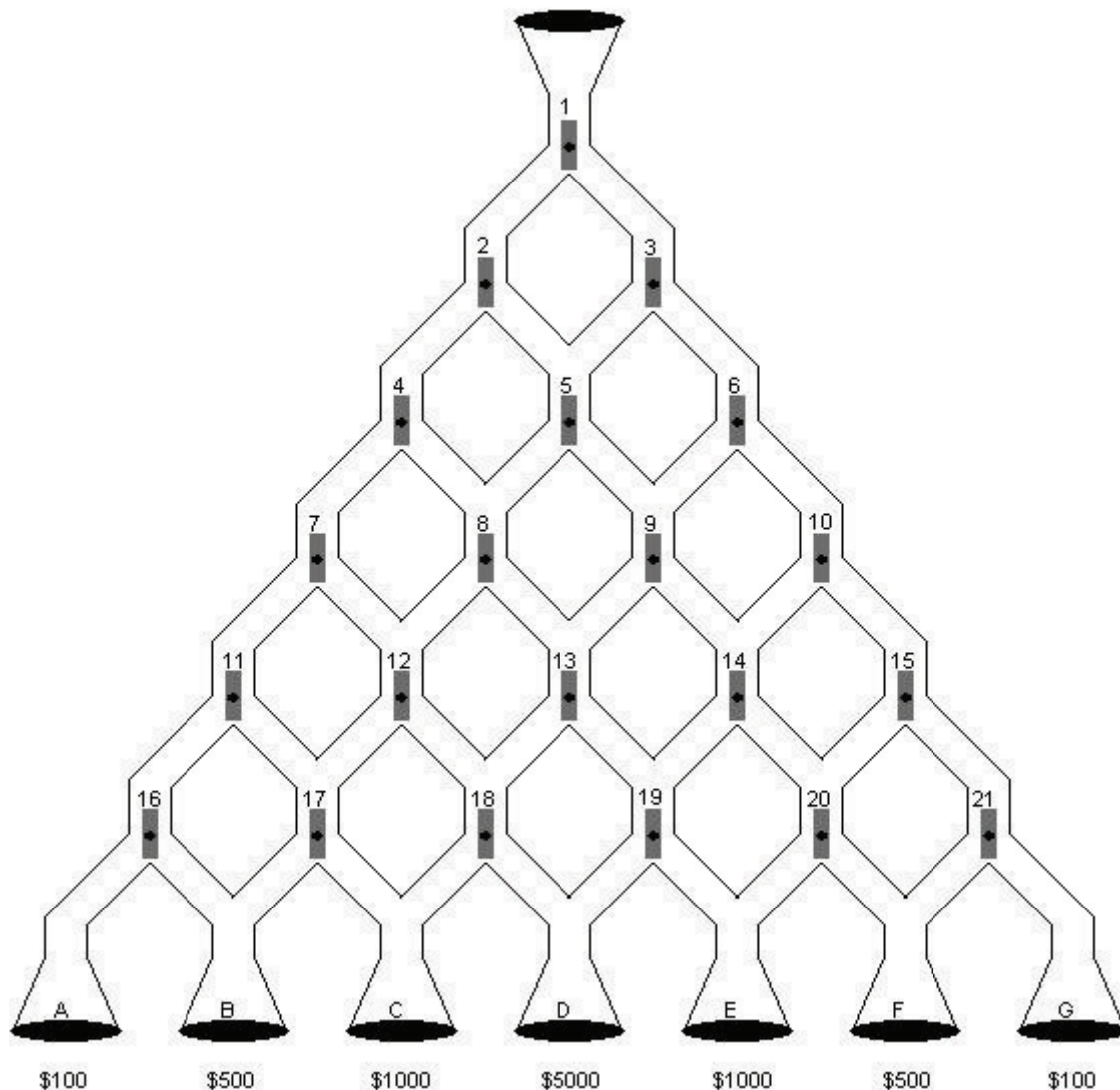**Figure 1: Lost Marbles Maze**

Input

Input to your program consists of a series of bonus rounds. Each bonus round is contained on a line by itself with the 21 switch settings (position for switch X appears in column X of the input line) for the round. All switches will

be set either to "L" or "R" for Left and Right respectively. Your program should continue reading bonus rounds until it reaches the end of file.

Output
For each bonus round, your program should output the prize money won with the pivots set according to the input. Your program must print the dollar sign ("$") and prize amount with no leading, trailing, or embedded spaces starting in column 1. Print each prize amount on a separate line.

Example: Input File
```
LLLLLLLLLLLLLLLLLLLLL
LRLRRLLLLRRLLRLRRLRRL
LRRLLRLLRLLLLRRLRRLLR
LRRLLRLLRLLLLRRLLRLLR
```
Output to screen
```
$100
$1000
$1000
$500
```