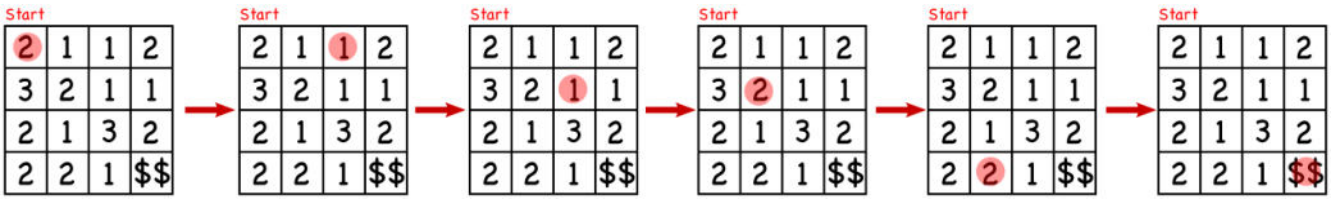
# Puzzle of the Week

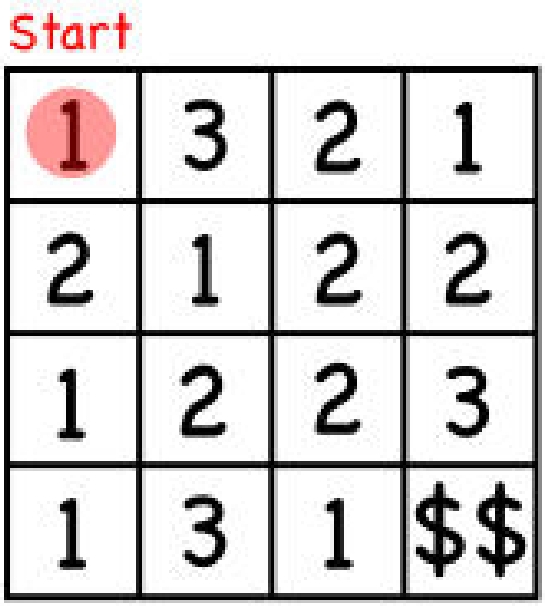
# *Treasure Map – 1*

When standing on a square in a treasure map, you must move exactly the given number of squares, and you can only move to the right, left, up, or down.

Here is an example of one way to solve this example of a treasure map.




THE CHALLENGE: Find a route from the Start to the $$ in this new treasure map.




EXPLORATION: Make treasure maps for others to solve. Can you make them with only one route to the treasure?

# Puzzle of the Week
# *Treasure Map – 1 – Notes*

THE CHALLENGE: These puzzles are fun for children to play around with. They can be particularly fun if you make a big map on the ground (perhaps chalk or painter's tape) that they can walk through as they try to discover the secret route to the treasure.

Beyond playing around and practicing with small numbers, these can give excellent practice with an important problem-solving technique. Namely, working forwards from the beginning and backwards from the end. These puzzles are simple enough that this technique is not essential, but it becomes extremely valuable for larger puzzles that are 5 by 5, 6 by 6, or larger.

Label the columns, from left to right, A, B, C, and D. Label the rows, from top to bottom, 1, 2, 3, and 4. The player starts at square A1 and wants to end up at D4.

Moving forwards from A1, the first squares hit are B1 and A2. B1 is no good because the only place it leads to is B4, and B4 just leads back to B1. So, let's move forward one move from A2. That brings us to C2 and A4.

Let's work backwards from D4 and see if we can get to either C2 or A4. The only squares that can get to D4 in one move are D2 and C4. The only square that can move to D2 is D1, and there is no way to get to D1, so that route is not going to work. That only leaves C4. The only way to get to C4 is from C2, and we've found the connection we need.

The answer is A1 => A2 => C2 => C4 => D4.