

Start at 4,1.
File transcription complete!

Initial State:

000000000
0SSSSS0K0
0S00SS000
0S0SSSSS0
0M0K00S00
000000000

Final Layout:

000000000
0222230K0
0100X3000
010344XX0
010K00X00
000000000

Findeth yon keys: U U U R R R R D D L L D

it went (ignoring multiples of the same direction), up, right,
down, (right, ((right) backtrack, down) backtrack) backtrack,
left, (up) backtrack, left, down.