. solve the s puzzle problem using the following input and output

1 2 3
8 4
7 6 5

Thirtal state Goal state

1 state
DU 3 5 2 4 6 5 1 2 3 8 6 4 7 5
23 84 824 824 65 765 765
8 1 3 2 4 1 6 5 1 6 5 1 2 3 1 2 3 8 6 4 8 6 4 7 5 7 5
8 1 3 7 2 4 6 5
3 2 4 3 2 4 3 2 4 3 5 2 4 3 7 6 5 7 6 5
DU 2 4 3 2 3 7 6 5