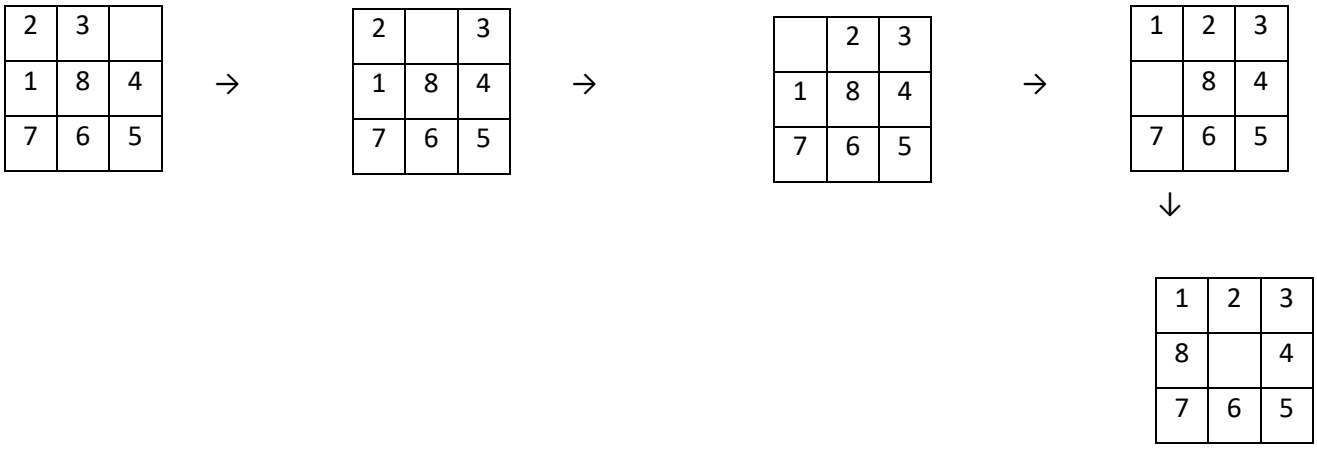
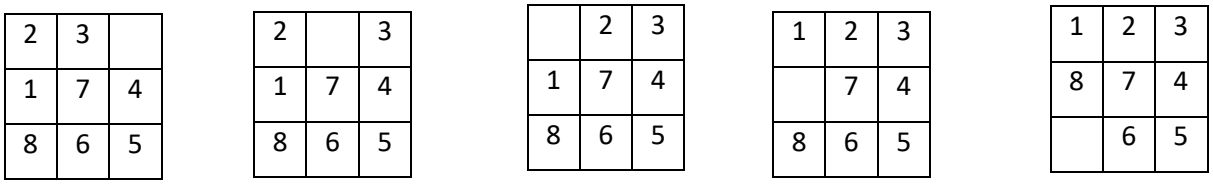
a)



reached in 4 actions / 5 states, terminates at global minima.

b)



reached in 4 actions / 5 states and it does not terminate

Final state of termination is a local minimum.

It will always oscillate between 1 misplaced tile once local minimum is reached as nothing better.

5th action is where we check to terminate as no less than 2 misplaced tiles can be found.