Write a program which performs iterative deepening depth first search (Figure 3.12, AIMA 4th edition) to find the solution to any given board position for 15 puzzle

Input

The input should be given in the form of a sequence of numbered tiles for initial board configuration, '0' indicating the empty space.

Output:

- 1. Moves
- 2. Number of Nodes expanded
- 3. Time Taken
- 4. Memory Used