For the implementation of the puzzle, I have designed the graph of puzzle in the following way:

1	2	1
1	1	1
2	2	2

If we have 3 * 3 graph then, I have represented the node of the graph as the the index of square of the puzzle:

0	1	2
3	4	5
6	7	8

I have represented the edge of the graph as the cost of connecting edge 1 or 2...1 or 3….up to 1….8 that is determined by the field of the puzzle.

The **small part of graph** representing above puzzle would be: