An 8 puzzle is a simple game consisting of a 3 x 3 grid (containing 9 squares). One of the squares is empty.

The object is to move to squares around into different positions and having the numbers displayed in the "goal state".

**GOAL**

1 2 3

8 0 4

7 6 5

**Initial**

2 8 3

1 4 0

7 6 5