```
Enter the initial state (9 digits, 0 for blank): 283164705
Enter the goal state (9 digits, 0 for blank): 123804765

Initial State:
2 8 3
1 6 4
7 _ 5

Goal State:
1 2 3
8 _ 4
7 6 5

Total states explored (branches): 34
All explored states:
2 8 3
1 6 4
7 _ 5

2 8 3
1 _ 4
7 6 5

2 8 3
1 6 4
_ 7 5

2 8 3
1 6 4
7 5 _

2 _ 3
1 8 4
7 6 5

2 8 3
_ 1 4
7 6 5

2 8 3
1 4 _
7 6 5

2 8 3
_ 6 4
1 7 5

2 8 3
1 6 _
7 5 4

_ 2 3
1 8 4
7 6 5

2 3 _
1 8 4
7 6 5
```

```
_ 8 3
2 1 4
7 6 5


2 8 3
7 1 4
_ 6 5


2 8 _
1 4 3
7 6 5


2 8 3
1 4 5
7 6 _


_ 8 3
2 6 4
1 7 5


2 8 3
6 _ 4
1 7 5


2 8 _
1 6 3
7 5 4


2 8 3
1 _ 6
7 5 4


1 2 3
  8 4
7 6 5


2 3 4
1 8 _
7 6 5


8 _ 3
2 1 4
7 6 5


2 8 3
7 1 4
6 _ 5


2 _ 8
1 4 3
7 6 5


2 8 3
1 4 5
7 _ 6


8 _ 3
```

```
2 6 4
1 7 5


2 _ 3
6 8 4
1 7 5


2 8 3
6 4 _
1 7 5


2 8 3
6 7 4
1 _ 5


2 _ 8
1 6 3
7 5 4


2 _ 3
1 8 6
7 5 4


2 8 3
_ 1 6
7 5 4


2 8 3
1 5 6
7 _ 4


1 2 3
8 _ 4
7 6 5
```

Solution found in 5 moves:
```
2 8 3
1 _ 4
7 6 5


2 _ 3
1 8 4
7 6 5


_ 2 3
1 8 4
7 6 5


1 2 3
_ 8 4
7 6 5


1 2 3
8 _ 4
7 6 5
```

Samhitha A 1BM23CS293