

Outputs:

Run1:

```
---8 puzzle Solver---  
Enter the start state matrix
```

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

```
Enter the goal state matrix
```

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

```
  |  
  |  
 \'|/
```

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

```
  |  
  |  
 \'|/
```

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

```
  |  
  |  
 \'|/
```

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

```
  |  
  |  
 \'|/
```

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

```
Number of moves:  4
```

Run2:

```
----- 8 puzzle Solver-----
Enter the start state matrix

2 3 _
1 5 6
4 7 8
Enter the goal state matrix

1 2 3
4 5 6
7 8 _

      |
      |
      |
    \'/
2 3 _
1 5 6
4 7 8

      |
      |
      |
    \'/
2 _ 3
1 5 6
4 7 8

      |
      |
      |
    \'/
L 2 3
1 5 6
4 7 8

      |
      |
      |
    \'/
1 2 3
1 5 6
4 7 8

      |
      |
      |
    \'/
1 2 3
4 5 6
_ 7 8

      |
      |
      |
    \'/
1 2 3
4 5 6
7 _ 8

      |
      |
      |
    \'/
1 2 3
4 5 6
7 8 _

Number of moves: 7
```