

## 8 Puzzle using BFS

```
Start State:
[[1 2 3]
 [8 0 4]
 [7 6 5]]

Goal State:
[[2 8 1]
 [0 4 3]
 [7 6 5]]

States Explored: 358

Solution:

action: up
[[1 0 3]
 [8 2 4]
 [7 6 5]]

action: left
[[0 1 3]
 [8 2 4]
 [7 6 5]]

action: down
[[8 1 3]
 [0 2 4]
 [7 6 5]]

action: right
[[8 1 3]
 [2 0 4]
 [7 6 5]]

action: right
[[8 1 3]
 [2 4 0]
 [7 6 5]]

action: up
[[8 1 0]
 [2 4 3]
 [7 6 5]]

action: left
[[8 0 1]
 [2 4 3]
 [7 6 5]]
```

```
action: left
[[8 0 1]
 [2 4 3]
 [7 6 5]]

action: left
[[0 8 1]
 [2 4 3]
 [7 6 5]]

action: down
[[2 8 1]
 [0 4 3]
 [7 6 5]]

Goal Reached!!
```