

```
neighbors.add(Node(newState, parent=node,
move=direction))
return neighbors
```

```
function ReconstructPath(node):
```

```
    path = []
```

```
    while node.parent is not null:
```

```
        path.append(node.move)
```

```
        node = node.parent
```

```
    return reverse(path)
```

```
function MisplacedTiles(state, goalState):
```

```
    count = 0
```

```
    for i in range(3):
```

```
        for j in range(3):
```

```
            if state[i][j] != 0 and state[i][j] != goalState[i][j]:
```

```
                count += 1
```

```
    return count
```

Initial

2 8 3

1 6 4

7 5

2 8 3

1 6 4

2 6

2 8 3

h=0 1 4

7 6 5

2 8 3

7 4 2

6 5 7 6

h=4

4=7