

```
return False
```

```
# ----- Example Run -----
```

```
initial_state = [  
    [2, 8, 3],  
    [1, 6, 4],  
    [0, 7, 5]  
]
```

```
goal_state = [  
    [1, 2, 3],  
    [8, 0, 4],  
    [7, 6, 5]  
]
```

```
print("A* with Misplaced Tiles Heuristic")  
a_star(initial_state, goal_state)
```

```
A* with Misplaced Tiles Heuristic  
Goal reached with cost: 6
```

```
[4]: True
```

```

    return False

# ----- Example Run -----
initial_state = [
    [2, 8, 3],
    [1, 6, 4],
    [0, 7, 5]
]

goal_state = [
    [1, 2, 3],
    [8, 0, 4],
    [7, 6, 5]
]

print("A* with Manhattan Distance Heuristic")
a_star(initial_state, goal_state)

```

```

A* with Manhattan Distance Heuristic
Goal reached with cost: 6

```

```
[2]: True
```