

phase4.py > ...

```
24 def a_star(start, goal):
51     return path if path[0] == start else []
52
53 # Run A* and print results
54 path = a_star(START, GOAL)
55 print("Grid (1 = obstacle):")
56 print(grid)
57 print("\nPlanned Path from", START, "to", GOAL, ":")
58 print(path if path else "No path found.")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Python + - [ ] [X] ... ^ X

Grid (1 = obstacle):

```
[[0 0 0 0 0 0 0 0 0]
 [0 0 0 0 0 0 0 0 1]
 [0 0 0 0 1 1 0 0 0]
 [0 0 0 0 0 0 0 0 0]
 [0 0 1 0 0 0 0 0 0]
 [0 0 0 0 0 0 0 0 1]
 [1 0 0 0 0 0 0 1 0]
 [0 1 0 0 1 0 0 0 0]
 [0 0 0 0 0 1 0 0 0]
 [0 0 0 0 0 0 1 1 0]]
```

Planned Path from (0, 0) to (8, 8) :

```
[(0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (0, 5), (1, 5), (1, 6), (2, 6), (3, 6), (4, 6), (5, 6), (5, 7), (6, 7), (6, 8), (7, 8),
 (8, 8)]
```

PS C:\Users\AMSHAVARTHEN.S\Desktop\Naan mudhvan>

Ln 58, Col 42 Spaces: 4 UTF-8 CRLF {} Python 3.12.4 ('base')