🧠 Think Your Way Out

Think Your Way Out is an AI-powered project that solves mazes using multiple intelligent search strategies. Instead of brute-forcing your way through, this project shows how smart algorithms can “think” their way to the solution.

🚀 Algorithms Used

- 🔍 Breadth-First Search (BFS)
- 🔺 Hill Climbing
- ♟️ Alpha-Beta Pruning (on game-like decisions)
- 💡 Iterative Deepening Search

Each algorithm brings its own ways to how a path is found in a maze — whether it's exploring level by level, climbing towards the best option, or pruning bad decisions before they grow.

🧩 Project Goals

- Visualize how each algorithm explores the maze
- Compare their performance and pathfinding efficiency
- Understand the strengths and limits of each approach

📦 Technologies Used

- Python
- NumPy
- Matplotlib
- Custom maze/grid logic

🛠️ How to Run

1. Clone the repository
2. Install the required libraries
3. Open the notebook and run step-by-step

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