

When I first looked at the problem before I actually started to work on it, it reminded me of a few questions I'd practiced for ESC112 which involved a dumbed down constrained version of DFS with a lower time complexity. However, as I worked on it, I realised DFS would somehow have gotten the cost (that too in a lot of time) but it failed to yield me a path. I researched a bit, asked AI about how to approach this particular problem and realised I had to implement Dijkstra, wherein I implemented a priority queue with two parameters, the total cost up till that point and the overall position of that point on the grid. I took the top element in the priority queue and looked at the nodes adjacent to it, I kept doing this and popping the undesirable nodes out until I reached the end point where I back traced and printed all the coordinates.