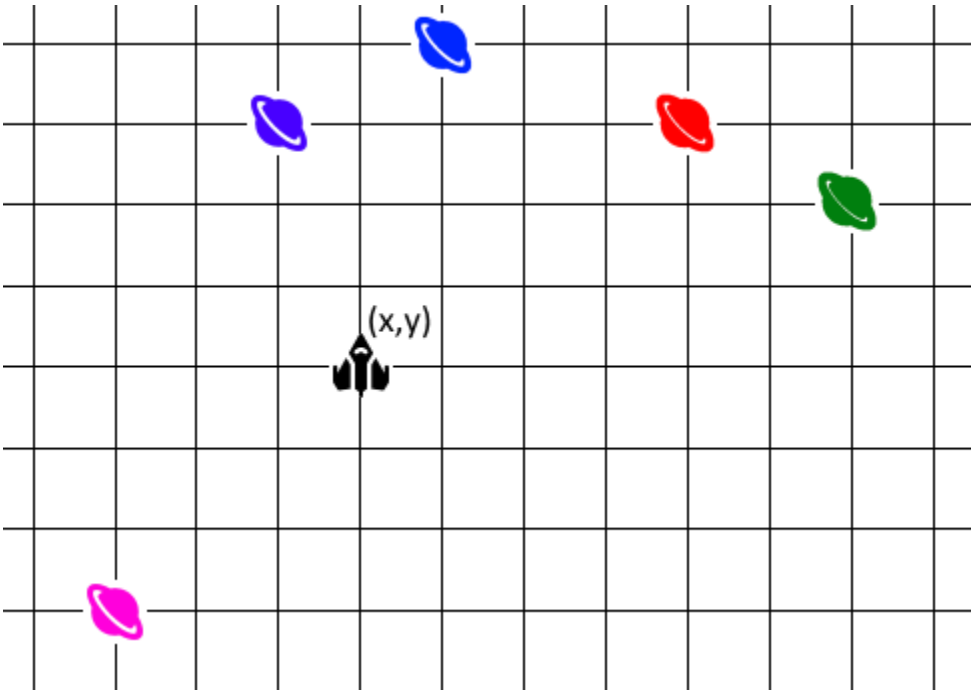
Spaceship autopilot problem

You are a software developer in Star Wars universe and you are hired by Han Solo to extend his spaceship autopilot computer with a function of finding shortest route to visit all destinations from the list. Han Solo would not be able to verify that the route is absolute short, but he will certainly get angry if navigation fails on a simple set.



Requirements

- Implement function provided in the attachment to find shortest route given current coordinate and list of destinations. You can't change the signature of the function.
- Universe is two dimensional, coordinates are represented by (x, y) where x and y are integers
- Destinations in the list are unique
- There is no need to return to the initial point
- Supplied test (8 destinations) should pass within few seconds max. Faster solutions will be marked higher
- Solution code should be production-like quality and show proficiency in the chosen language
- For this assignment it's not allowed to use any third party libraries except what already used in the project
- There are multiple solutions to the problem, try to be realistic what can be achieved in few hours