Problem Analysis:

**Problem Description:**

1. This project involves dealing with a 2D map grid where buildings are represented by specific symbols.
2. We have to add the routes without overlapping the building for the green, blue, and yellow trucks.
3. The project includes functions to populate the map, create routes, add routes to the map, calculate distances, and find the shortest path while avoiding buildings.

**Here is what we analysed from the description:**

1. We need a structure to define the meanings of symbols used in the map.
2. We have a Data structure Point to represent a point on map. It included row and column.
3. We have data structure to represent a route, which consists of a collection of points. It should also include a symbol for route color (e.g., blue, green, yellow).
4. We have a data structure to represent the map grid i.e., Map. It includes an 2D array of symbols and the number of rows and columns.