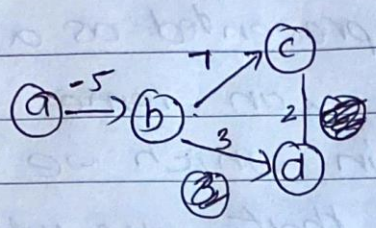
Homework 12.

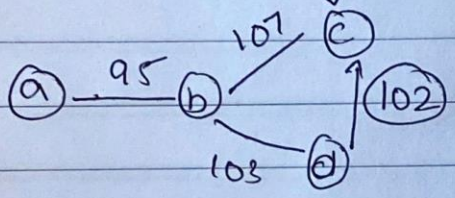
Problem 1.

a) Consider the example where we are trying to reach from a to c.



without adding any constant to it the optimum distance is from a → b → d → c.

However adding 100 to it.



Now however if we ran Dijakra's algorithm the distance would be a → b → c which is FALSE. Therefore the algorithm is wrong.

Problem 2.

Implemented in "OptimalMeetup.cpp".

Problem 3.

a) The Problem can be represented as a graph problem as we can ~~have~~ create a graph in which we store all possible locations that are valid a player can move into and set is a 1. Then later on simply run Pijkstra's algorithm to find shortest path.