

Viagogo Coding Challenge

Requirements

- Code in any language you like but please provide clear instructions on how we should build & run your code.
- Please use any source control system you like, and send us a link via github or google drive (our email system blocks zip files).
- The first requirement is your code meets the requirements.
- Secondary requirements are whether your code is idiomatic for the language being coded in, easy to read, and clearly laid out.

Scenario

- Your program should randomly generate seed data.
- Your program should operate in a world that ranges from -10 to +10 (Y axis), and -10 to +10 (X axis).
- Your program should assume that each co-ordinate can hold a maximum of one event.
- Each event has a unique numeric identifier (e.g. 1, 2, 3).
- Each event has zero or more tickets.
- Each ticket has a non-zero price, expressed in US Dollars.
- The distance between two points should be computed as the Manhattan distance.

Instructions

- You are required to write a program which accepts a user location as a pair of co-ordinates, and returns a list of the five closest events, along with the cheapest ticket price for each event.
- Please detail any assumptions you have made.
- How might you change your program if you needed to support multiple events at the same location?
- How would you change your program if you were working with a much larger world size?

Example Program Run

Please Input Coordinates:

> 4,2

Closest Events to (4,2):

Event 003 - \$30.29, Distance 3

Event 001 - \$35.20, Distance 5

Event 006 - \$01.40, Distance 12

Please let [Hannah](#), [Eddie](#), [Fran](#) or [Natalia](#) (for Limerick positions) know if you have any questions!