Completed Version - Viagogo Coding Challenge

This program 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.

This program is written in Java.

Instructions to run: (using command prompt / terminal)

e.g to compile - [javac Event.java]

1. compile Event.java file

2. compile Coordinates.java file

3. compile Viagogo.java file   //contains main method

e.g to run compiled file - [java Viagogo]

4. Run Viagogo.java file

5. Follow instructions on the screen

Assumptions:

- Random price has a maximum price of $1000

- Event details that are stored will only be EventID and price

- Each event will have only 1 ticket type

- Number of tickets are not assigned to events

- Ticket returned is always the cheapest ticket

- Random number of events will be generated - possibility of having an event at every coordinate

- Error will not occur when user enters a coordinate with more than 2 values

How might you change your program if you needed to support multiple events at the same location?

- Have a list that hold Event objects in that position

OR

- Create a new class which holds all the events. Each event will be pointed to a position in the 2D array (represented as the coordinate)

How would you change your program if you were working with a much larger world size?

- Have a more efficient method for sorting event distances