1. Explain the term “overloading” and give an example in Java.

2. (a) Suppose you live in a manhattan (square) matrix, where all roads lead N-S or E-W. Using what you have learnt about defining classes, such as the Wizard class, devise a class Travel, for distance traveled. Include instance variables for the distance north, south, east and west

(b) Devise two class methods, absolute and crowflies, to calculate the absolute total distance traveled and the effective distance traveled “as the crow flies” respectively. As much as possible, abstract the methods you need to do these calculations.

(c) Write getters and setters for the Travel class, these methods should display messages whenever they are used.

(d) Write increment class methods for the Travel class such that class variables are incremented when corresponding methods are called.

Additional instructions:

Please turn in a hardcopy of your assignment to Art Dhallin. The assignment will not be graded. Art has a box in the ISE office.