CSCI 552 (Spring 2018)

Project #1

Handout: Thursday, February 1, 2018
Due: 11:59 pm, Thursday, February 15, 2018
Total points: 50

All projects will be submitted through Canvas.
Your submission should include: (1) your source code files; (2) the executable file; and (3) a README file containing necessary instructions, known bugs, and any other notes you would like me to read.

A height field is a regular array of 2D points $h = f(x, y)$ where h is an altitude above the point (x, y). Height field is often used to represent terrain data, and can sometimes be generated using a gray-scale image, where the gray-scale value at each pixel is treated as the altitude at the pixel location. For the given gray-scale image, generate a height field dataset, and then write a VTK program to visualize this height field. Please use an interactor to allow the user to interact with your visualization.You can use any dataset representation in VTK, and any method to access and visualize the dataset. But you need to describe your data representation and visualization method in your "README" file.