Problem Set 2 Latex Report

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1 Problem 1

The binary equivalent of 121 is 1111001

2 Problem 2

The Madelung constant for NACL with $L = 100$ using for loops came out to be 1.7418, the constant not using for loops with $L = 100$ came out to be 1.5166 but took much shorter to compute

3 Problem 3

See mandelbrot set figure below

4 Problem 4

The inaccuracies in parts a and b of this problem are caused by how the computer adds floats. An easy solution is to use 64 bit floats instead of 32 bit ones.

Mandelbrot Set