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PROBLEM SET

Assignment 3

Math 4330, Spring 2017

February 22, 2017

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- Write all of your answers on separate sheets of paper. You can keep the question sheet.

- You **must** show enough work to justify your answers. Unless otherwise instructed, give exact answers, not approximations (e.g., $\sqrt{2}$, not 1.414).

- This problem et has 1 problems. There are **200 points total**.

Good luck!

Problem 1.

A. Write your own code to convert positive integers between base 10 and base 2 (or, optionally, more general bases). Show how your algoritm works. Use loops, integer division and the modulus operator. The best way to present the digits of the result of the conversion is as a list.

B. Look at the available python builtins and python modules on the internet to find the best way to accomplish this task with these resources. Present demonstration code and output.