Aero 320: Numerical Methods

Lab Assignment 3

Fall 2013

Problem 1

Base number conversion

Write a program that lets the user convert binary to decimal or decimal to binary.

(a) Write a function BinaryToDecimal() that takes binary number as input and returns the corresponding decimal number as output. Use your code to convert the following from binary to decimal numbers.

(i) 11010

(ii) 10101.0101

(iii) 11.00100100001

(b) Write a function DecimalToBinary() that takes decimal number as input and returns the corresponding binary number as output. Use your code to convert the following from decimal to binary numbers.

(i) 5.34375

(ii) 0.1

(iii) Your computer's IP address