

1 Implementing Floating Point in MIPS

Write a MIPS assembly language program to calculate the sum of A and B, assuming they are stored using the DEC PDP-8 format specified in Exercise 3.11.1. Now, modify the program to calculate the sum assuming the HP 2114-2116 format specified in Exercise 3.11.3. Which format is easier for a programmer to deal with? How do they each compare to the IEEE 754 format? (Do not worry about sticky bits for this question).

NOTE: This extra credit assignment is due by 3:05 p.m. on Thursday April 7th (regardless of whether you are in the MW class or the TR class). Furthermore, you must demonstrate your solution to me either in my office or in the lab (and be able to answer any questions I have about your implementation of the assignment).

A completely successful solution will receive 15 points extra credit to be applied to the score of your test 1 (i.e. first midterm).