CS 10

Homework #3

Make a matrix of G, R, and S (8 combinations) and show the result of rounding the three two bit binary values bit_1,bit_0: 01, 10, and 11 (we'll treat 00 is an invalid case since it can't be normalized). Remember that if the top bit is 0 then a pre-normalization (left) shift is required. After rounding, a post-normalization (right) shift may be required. Use unbiased rounding; i.e. round to nearest or even. There are 24 total cases.

For example, the Case 0 is 01000 representing b_1b_0GRS.
Case 1 is 01001
Case 2 is 01010
…
Case 7 is 01111
Case 8 is 10000
And so on…

Each answer is just 2 bits.For example the answer to Case 0 is 10.