**Homework 10**

**Computer Architecture**

1. Mark each individual path in the flowchart for add and subtract operations by a number and then indicate the overall path that the algorithm takes when the following signed-magnitude numbers are computed. In each case give the value of AVF. The left most bit in the following numbers represents the sign bit.
   1. 0 101101 + 0 011111
   2. 0 101101 – 0 011111
2. Show the contents of registers E, A, Q, and SC (as in the table “Numerical Example for Binary Multiplier”) during the process of multiplication of two binary numbers, 11111 (multiplicand) and 10101 (multiplier). The signs are not included.