

Result

The output of Logic Analyzer is shown below:

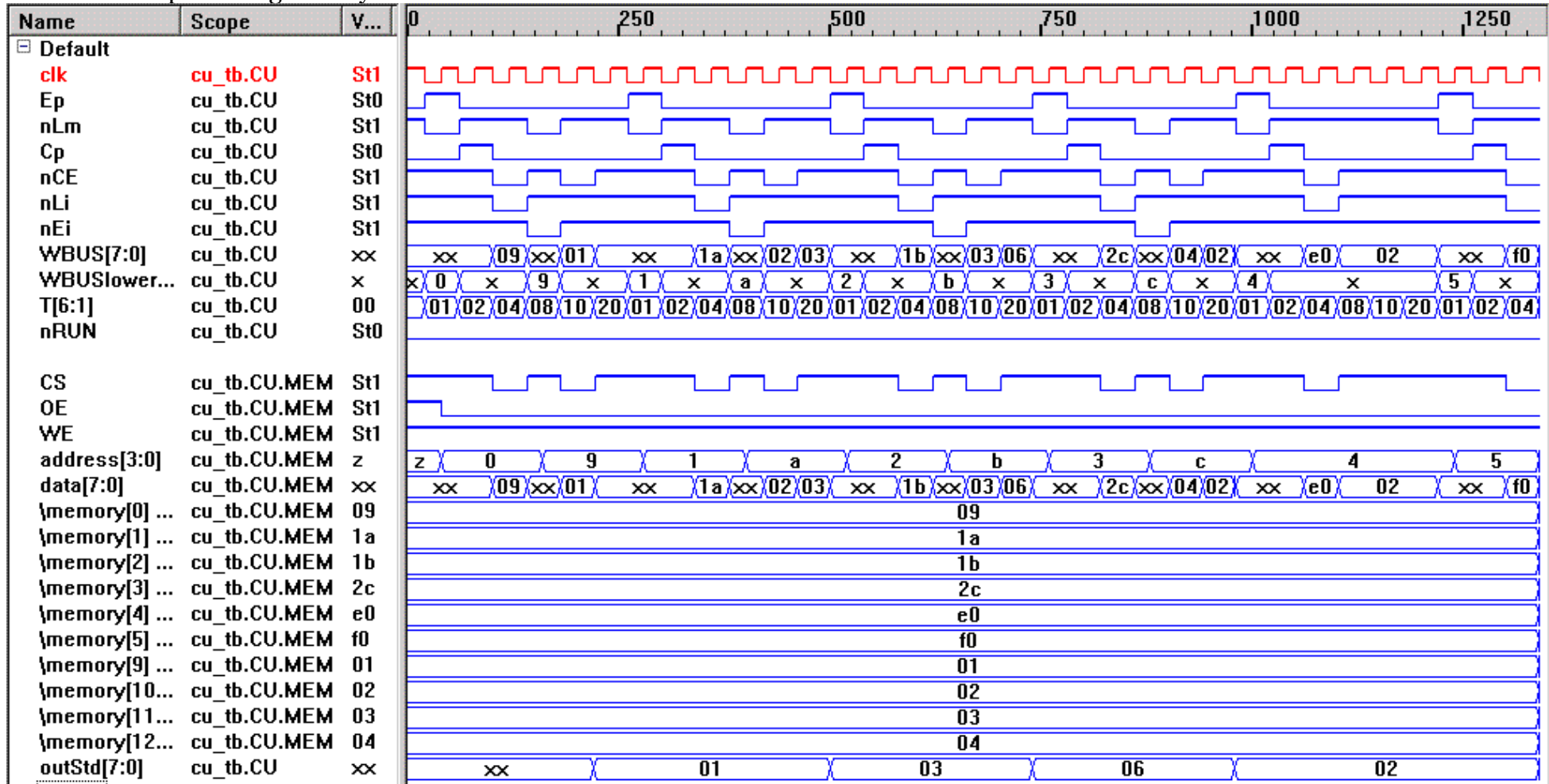


Illustration 1: Logic Analyzer trace for following instruction

```

memory[0] = 8'h09; // LDA 9H
memory[1] = 8'h1A; // ADD AH
memory[2] = 8'h1B; // ADD BH
memory[3] = 8'h2C; // SUB CH
memory[4] = 8'hE0; // OUT

memory[5] = 8'hF0; // HLT
memory[9] = 8'h01;
memory[10] = 8'h02;
memory[11] = 8'h03;
memory[12] = 8'h04;

```