Questions:

As part of your project, answer the following questions. You may discuss the concepts with

others in the class, but each of you must submit your answers in your own words.

1. What opcode will blank memory initialized to 0x00 look like to the processor?

2. Of the 256 possible opcodes we can get from and 8-bit opcode, how many are not being used

in our instruction set, i.e., how many instructions could we add for future expansions of our

processor?

3. What would we need to add to our simulator to be able to include the following instructions:

compare ACC with a constant, PUSH to or PULL from the stack, and take the 2's complement of

ACC?

4. If executeInstruction() were divided into two parts, decode and execute, what additional

global resources would be needed for your simulator?