

Please ask your questions and participate in the class discussion to understand the questions. You are expected to solve the homework questions individually. You may discuss the materials with others to enhance your understanding. However, **do not copy**. Follow the submission and grading policies. Show all steps with your solutions for full/partial points.

NAME & WSU ID:

Total Points: 50

(2 points) Provide (i) your name & WSU ID and (ii) course & homework information.

1. (3+3 = 6 points) According to the 'Definition of a Credit Hour' described in syllabus, briefly explain how many total hours you are expected to spend to succeed in this course (a) in a normal week and (b) in a 15-week semester.
2. (2+2 = 4 points) (a) What are the instructor's student/office hours? (b) How to contact the instructor during the student/office hours?
3. (5x4 = 20 points) Using the lecture slides, briefly discuss: (a) computer, (b) computer architecture, (c) von Neumann architecture, (d) pure Harvard architecture, and (e) PDP-8 architecture.
4. (10 points) Based on the class-lectures, briefly discuss major five steps to execute an instruction in a simple computer system.
5. (8 points) Based on the class-lectures, clearly discuss the major five steps to execute the following five separate instructions in a simple computer system.
 - a) $[DReg-1] = 0$
 - b) $[Mem-1] = 1$
 - c) $[Mem-2] = 2 * [Mem-2]$
 - d) Go to Mem-3