Homework 1 [Due at lecture on Wed, Jan 28]

Primary contact for this homework on Piazza is Sujith Surendran.

Note: You must do this homework alone. Please staple multiple pages together.

Problem 1 (4 points)

a. How many Midterm exams do you have for this course? What are the dates on which they are held?

b. Do you have a conflict with any of the exams? If so, have you informed Prof. Hill about the conflict?

c. Do you have a final exam for this course?

d. What is the URL for the lecture notes of this course?

Problem 2 (3 points)

(This question has no wrong answers.)

a. What is your expected major(s)?

b. Have you taken any other Computer Science courses in the past? If yes, please list them.

c. What do you hope to learn from this course?
Problem 3 (2 points)

“The police shot the man with a gun”?
   a. How many reasonable interpretations can you provide for John’s statement? List them.
   b. What property does this sentence demonstrate that makes it unacceptable as a statement in a program?

Problem 4 (4 points)

   a. Name at least three things specified by an Instruction Set Architecture (ISA)

   b. In your own words, explain how does a microarchitecture differ from an ISA? Why do you think we might want to design a different microarchitecture for an existing ISA?

Problem 5 (4 points)

List the levels of transformation and give a brief summary of what each layer signifies.

Problem 6 (4 points)

List three properties of algorithms and briefly describe them.