

CSCI 2321 (Computer Design), Spring 2021

Reading Quiz 3

Credit: 10 points.

1 Reading

Be sure you have read, or at least skimmed, sections 1 through 4 of Chapter 2.

2 Instructions

Answer the questions below using *only* the course textbook (i.e., no Web searches). Please work independently rather than in groups, and include the Honor Code pledge in what you turn in, either the full pledge or just the word “pledged”. (Please put this in the same document as your answers, so I don’t overlook it.)

You may write out your answers by hand and scan them, or you may use a word processor or other program, but please submit a PDF or plain text via e-mail to my TMail address. (No links to shared files on Google Drive please.) Please use a subject line that mentions the course and the assignment (e.g., “csci 2321 quiz 3” or “computer design quiz 3”).

3 Questions

1. (2.5 points) Convert the hexadecimal value
abcd 4321
to binary, and convert the binary value
0001 1111 0100 1100 1000 0110
to hexadecimal.
2. (2.5 points) Earlier the textbook (and I) said that it’s good to limit the number of registers because more makes for more expensive chips. Chapter 2 gives another reason to keep the number of registers relatively small. What is it?
3. (2.5 points) What is “binary compatibility”, and why is this a good thing for people who write and distribute software?
4. (2.5 points) The textbook mentions two ways to translate `case` or `switch` constructs. What are they, briefly?