

CSCI 2321 (Principles of Computer Design), Spring 2014

Homework 3

Credit: 10 points.

1 Reading

Be sure you have read all assigned sections of Chapter 3.

2 Problems

Do the following problems. You may write out your answers by hand or using a word processor or other program, but please submit hard copy, either in class or in my mailbox in the department office.

1. (5 points) Do problems 3.12 and 3.18 from the textbook, substituting the values below for those in the tables. (Notice that the goal is to produce tables like the ones in Figures 3.6 and 3.10, except with 6-bit values rather than the 4-bit values in the figures. The problems tell you to use the hardware described in Figures 3.3 and 3.8, so you'll want to look at those figures — at least at the captions since that's where the textbook tells you how the various registers and work areas are initialized — but you'll probably also want to look at the algorithms sketched in Figures 3.4 and 3.9.)
2. (5 points) Do problems 3.22 and 3.23 from the textbook. (You will learn more if you do as much as possible just using pencil and paper and your brain rather than a calculator or the like.)