Assignment 16

The Control Units

Introduction

We will build Main Control Unit and the ALU Control Unit. The Main Control Unit sends signals out the various parts of the processor, controlling the actions that are taken, e.g., whether to write a value back to a register. The ALU Control Unit sends a signal to the ALU indication which operation to perform (add, subtract, and, or, nor).

The Circuit

I am including below diagrams showing the circuitry of both control units.

The Main Control Unit

The ALU Control Unit

Due Date

Name these circuits Main Control Unit (MAIN CTRL) and ALU Control Unit (ALU CTRL). Place them in a folder named Assignment 16 and put it in the dropbox. This assignment will be due by Friday, November 22.