

CSCI 516 - Fundamental Concepts in Computing and Machine Organization

Homework Assignment 5

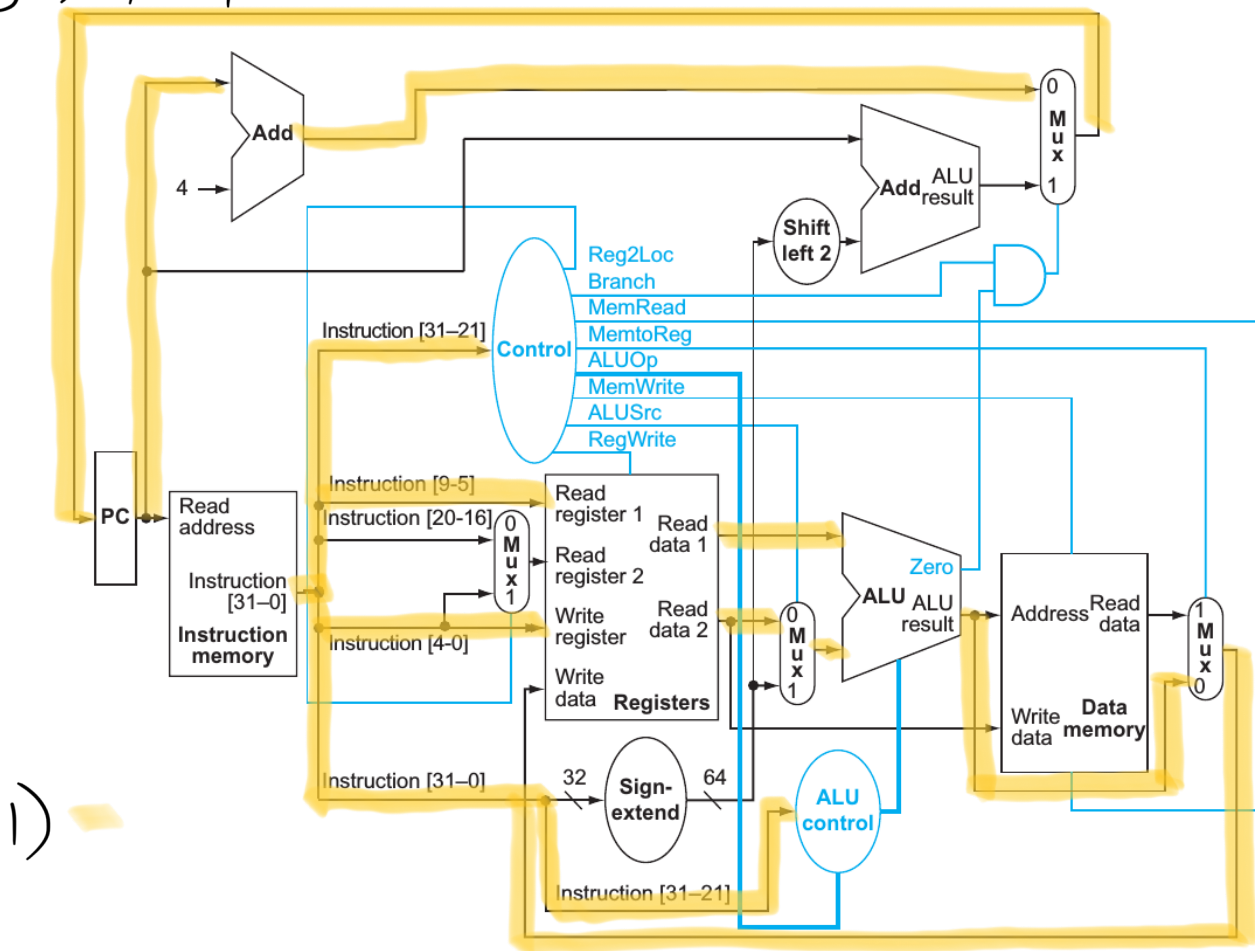
Due on 11/15/2022 (11:55 PM)

Questions

Given the data path of the processing unit, Trace the path for: **ADD X1, X1, X2;**
and **LDUR X2, [X27, #8];**

1. Highlight the data paths which are triggered when performing instruction above (use a figure for each instruction individually)
2. Label all the control signals needed for performing the instructions.

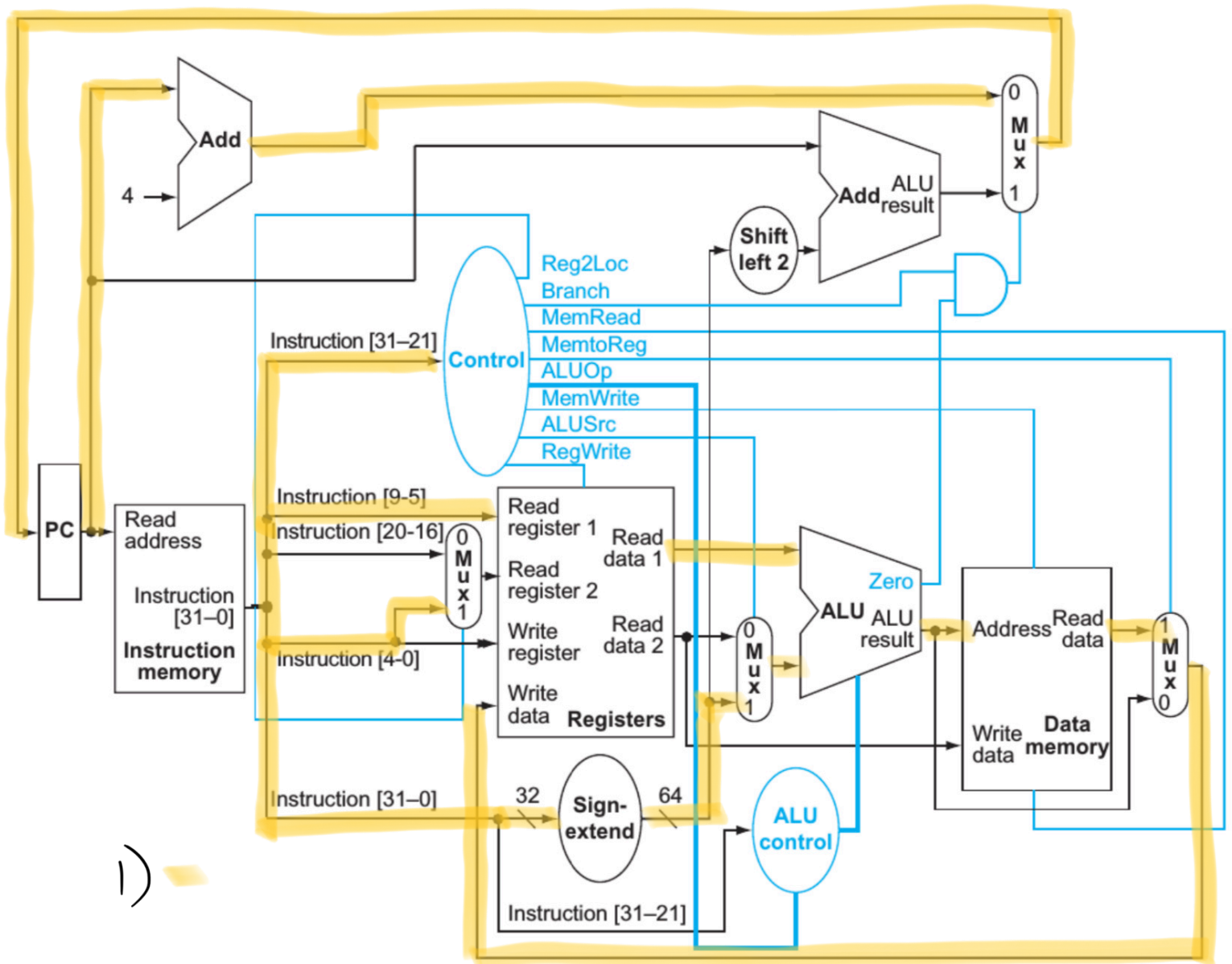
ADD X1, X1, X2:



2) Control signals Needed:

- RegDst Branch
- Reg Write
- ALUOp1

LDUR x2, [x27, #8]:



1)

2) Control signals Needed:

- ALUSRC
- Mem to Reg
- Reg Write
- Mem Read