

HW5 Answer Keys/Tips

Q1

0x00400200: 0xFE542023

opcode: 010011 Instruction[6:0]

rs1: 01000

rs2: 00101

rd: 00000

immediate: 0xFFFFFE0

ALUOperation: 0b0010

BranchTarget: 0x004001E0

PCSrc: 0

NextPC: 0x00400204

Although we only work on one instruction in HW, practice with more instructions.

Q2

The changes to PC and the register file are correct. Data memory is mistakenly changed. Find out how.

Q3

The problem description has already provided a lot of hints.