Haonan Wu, Siyuan Jing. Lab 5 description

We initially set register x1=3, x2=2, and the instructions are in the following order:

AND	BEQ
ADD	BLT
OR	SW
SUB	LW
XOR	LUI
SRA	ADDI
SLL	ORI
SLT	XORI

For all R-format instructions, we let register x3 be the destination of data calculation:

AND, ADD, OR, SUB, XOR, SRA, SLL, SLT x3, x1, x2

So the results will be:

x3=x1 AND x2=2; x3=x1 ADD x2=5; x3=x1 OR x2=3; x3=x1 SUB x2=1;

x3=x1 XOR x2=1; x3=x1 SRA x2=0; x3=x1 SLL x2=C; x3=x1 SLT x2=0;

BEQ: we compare x0 and x3, if True, jump to the next instruction, now x0=0, x3=0, so go to the next instruction

BLT: we compare x2 and x1, if x2<x1, go to the next instruction, now x2=2, x1=3, so it's True

SW: we store the data from x1 to 0000(x0) in Data memory, so in Data memory, x1's value 3 will be stored

LW: we load the value 3(which is from x1) from Data memory to x3, so x3 will be 3

LUI: we store 0x110 to x1, so x1=0x110 (LUI x1, 0x110)

ADDI: we add the value from x1 and 0x110 together, and store the sum to x2, so x2=0x220 (ADDI x2, x1, 0x110)

ORI: (ORI x2, x1, 0x110), because x1=0x110, so x2=0x110

XORI: (XORI x2, x1, 0x110), because x1=0x110, so x2=0x000