Building the Control for the MIPS processor

In this assignment, using Logisim you will build the ALU control and Main Control for the MIPS processor covered in class.

The ALU Control

Build the ALU control covered in class and in the text. The inputs should be (in order from top to bottom): ALUOp0, ALUOp1, Func0, Func1, …, Func5.

The outputs should be (also from top to bottom): ALUCntl0, ALUCntl1, ALUCnt2

The Main Control

Build the Main control covered in class and in the text. The inputs should be (from top to bottom): Op0, Op1, …, Op5.

The outputs should be (from top to bottom): branch, RegDst, MemRead, MemtoReg, ALUOp0, ALUOp1, MemWrite, ALUSrc, RegWrite.