1. Following is the simple implementation of RISC-V instruction subset (R-type, lw, sw, beq). Modify this diagram for the implementation to be able to also execute the following two instructions:-
- jal
- addi

Fill the truth table for these two instructions:-

I_6 I_5 I_4 I_3 I_0 I_1 I_0 Input (opcode)							ALUSrc	mem-to-ry	Regwrite	memRead	mem write	branch	ALUop1	ALUop0	Jump	Mem to Reg 2
R	0	1	1	0	0	1	1	0	0	1	0	0	0	1	0		
lw	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0		
sw	0	1	0	0	0	1	1	1	X	0	0	1	0	0	0		
beq	1	1	0	0	0	1	1	0	X	0	0	0	1	0	1		
jal	1	1	0	1	1	1	1	X	1	1	0	0	0	X	X	1	0
addi	0	0	1	0	0	1	1	1	0	1	0	0	0	0	0	0	X