Instruction	Op[6:4]	Funct[3:2]	RegWrite	AluSrc[1:0]	Branch	MemWrite	MemtoReg	ALUOp
B	000	N/A	0	X	1	0	0	010
ADD	001	N/A	1	01	0	0	0	010
ADDI	010	N/A	1	01	0	0	0	010
SUB	011	N/A	1	00	0	0	0	110
SLT	100	N/A	0	00	0	0	0	111
XOR	101	N/A	1	00	0	0	0	001
AND	110	N/A	1	00	0	0	0	000
AddPtr	111	00	1	11	0	0	0	010
ResetPtr	111	01	1	11	0	0	0	000
STORE	111	10	0	10	0	1	0	010
LOAD	111	11	1	10	0	0	1	010