				RD   AS   M2R   RW   MR		
Instruction	Category	Type	Instruction	MW	BEq   BNeq   S   J	ALUOp
A - 0110	Arithmetic	R	add	100 100	0000	000
B - 0001	Arithmetic	1	addi	010 100	0000	000
C - 1110	Arithmetic	R	sub	100 100	0000	001
D - 1001	Arithmetic	1	subi	010 100	0000	001
E - 1000	Logic	R	and	100 100	0000	011
F - 0010	Logic	1	andi	010 100	0000	011
G - 0000	Logic	R	or	100 100	0000	010
H - 1101	Logic	1	ori	010 100	0000	010
I - 0111	Logic	R	sll	110 100	0010	101
J - 1010	Logic	R	srl	110 100	0010	110
K - 1100	Logic	R	nor	100 100	0000	100
L - 0100	Memory	1	SW	010 001	0000	000
M - 1011	Memory	1	lw	011 110	0000	000
N - 0101	Control-conditional	1	beq	000 000	1000	001
O - 0011	Control-conditional	1	bneq	000 000	0100	001
P - 1111	Control-unconditional	J	j	000 000	0001	000