Op-Code	Category	Type	Instruction
0000	Logic	I	andi
0001	Arithmetic	I	addi
0010	Logic	I	ori
0011	Logic	R	srl
0100	Arithmetic	R	add
0101	Memory	I	sw
0110	Memory	I	lw
0111	Logic	R	and
1000	Logic	R	nor
1001	Branching	I	bneq
1010	Branching	J	j
1011	Logic	R	sll
1100	Arithmetic	R	sub
1101	Branching	I	beq
1110	Arithmetic	I	subi
1111	Logic	R	or

Table 1: Instruction Table with Op-Codes, Categories, and Types $\,$