

OPCODE	FUNC 3	FUNC 7	INSTRUCTION	TYPE	IF	ID	EX	MEM	WB		RegWrite	MemToReg	MemWrite	MemRead	BranchDolt	BranchOP	ALUSrc	ALUOp	ImmType				
0110111	-	-	LUI	U	X	X	X	X			1	01	0	0	0	X	1	1010	000				
0010111	-	-	AUIPC	U	X	X	X	X			1	01	0	0	1	011	1	0000	000	<-- special branch op		<-- branch do it = 1 para	
1101111	-	-	JAL	J	X	X	X	X			1	10	0	0	1	010	1	0000	001			entrar pc na ula	
1100111	000	-	JALR	I	X	X	X	X			1	10	0	0	1	010	1	0000	011				
1100011	000	-	BEQ	B	X	X	X				0	X	0	0	1	000	1	0000	010				
1100011	001	-	BNE	B	X	X	X				0	X	0	0	1	001	1	0000	010				
1100011	100	-	BLT	B	X	X	X				0	X	0	0	1	100	1	0000	010				
1100011	101	-	BGE	B	X	X	X				0	X	0	0	1	101	1	0000	010				
1100011	110	-	BLTU	B	X	X	X				0	X	0	0	1	110	1	0000	010				
1100011	111	-	BGEU	B	X	X	X				0	X	0	0	1	111	1	0000	010				
0000011	000	-	LB	I	X	X	X	X	X		1	00	0	1	0	X	1	0000	011				
0000011	001	-	LH	I	X	X	X	X	X		1	00	0	1	0	X	1	0000	011				
0000011	010	-	LW	I	X	X	X	X	X		1	00	0	1	0	X	1	0000	011				
0000011	100	-	LBU	I	X	X	X	X	X		1	00	0	1	0	X	1	0000	011				
0000011	101	-	LHU	I	X	X	X	X	X		1	00	0	1	0	X	1	0000	011				
0100011	000	-	SB	S	X	X	X	X			0	X	1	0	0	X	1	0000	100				
0100011	001	-	SH	S	X	X	X	X			0	X	1	0	0	X	1	0000	100				
0100011	010	-	SW	S	X	X	X	X			0	X	1	0	0	X	1	0000	100				
0010011	000	-	ADDI	I	X	X	X	X			1	01	0	0	0	X	1	0000	011				
0010011	010	-	SLTI	I	X	X	X	X			1	01	0	0	0	X	1	0011	011				
0010011	011	-	SLTIU	I	X	X	X	X			1	01	0	0	0	X	1	0100	011				
0010011	100	-	XORI	I	X	X	X	X			1	01	0	0	0	X	1	0101	011				
0010011	110	-	ORI	I	X	X	X	X			1	01	0	0	0	X	1	1000	011				
0010011	111	-	ANDI	I	X	X	X	X			1	01	0	0	0	X	1	1001	011				
0010011	001	0000000	SLLI	I	X	X	X	X			1	01	0	0	0	X	1	0010	011				
0010011	101	0000000	SRLI	I	X	X	X	X			1	01	0	0	0	X	1	0110	011				
0010011	101	0100000	SRAI	I	X	X	X	X			1	01	0	0	0	X	1	0111	011				
0110011	000	0000000	ADD	R	X	X	X	X			1	01	0	0	0	X	0	0000	X				
0110011	000	0100000	SUB	R	X	X	X	X			1	01	0	0	0	X	0	0001	X				
0110011	001	0000000	SLL	R	X	X	X	X			1	01	0	0	0	X	0	0010	X				
0110011	010	0000000	SLT	R	X	X	X	X			1	01	0	0	0	X	0	0011	X				
0110011	011	0000000	SLTU	R	X	X	X	X			1	01	0	0	0	X	0	0100	X				
0110011	100	0000000	XOR	R	X	X	X	X			1	01	0	0	0	X	0	0101	X				
0110011	101	0000000	SRL	R	X	X	X	X			1	01	0	0	0	X	0	0110	X				
0110011	101	0100000	SRA	R	X	X	X	X			1	01	0	0	0	X	0	0111	X				
0110011	110	0000000	OR	R	X	X	X	X			1	01	0	0	0	X	0	1000	X				
0110011	111	0000000	AND	R	X	X	X	X			1	01	0	0	0	X	0	1001	X				