15 INSTRUCTIONS -RISC-V

RISCV INSTRUCTIONS	INSTRUCTION AS IN OBJDUMP	FORMAT TYPE	32 BIT CODE FORMAT	32 BIT CODE	32 BIT CODE IN HEXADECIMAL
JALR (Jump and link Register)	zero # 0 <main-0x100b0>	I	imm[11:0] | rs1[19:15] | funct3[14:12] | rd[11:7] | opcode[6:0]	000000000000 00000 000 00000 1100111	0x000000e7
LD (load doubleword)	ra,8(sp)	I	imm[11:0] | rs1[19:15] | funct3[14:12] | rd[11:7] | opcode[6:0]	000000001000 00010 011 00001 0000011	0x00813083
OR (Bitwise OR)	a1, a1, a3	R	funct7[31:25] | rs2[24:20] | rs1[19:15] | funct3[14:12] | rd[11:7] | opcode[6:0]	0000000 01111 01011 110 01011 0110011	0x00d5e5b3
ORI (Bitwise OR Immediate)	s1,s1,16	I	imm[11:0] | rs1[19:15] | funct3[14:12] | rd[11:7] | opcode[6:0]	000000010000 01001 110 01001 0010011	0x0104e493
SRLI (Shift Right Local Immediate)	a5,a5,0x30	I	imm[11:0] | rs1[19:15] | funct3[14:12] | rd[11:7] | opcode[6:0]	000000110000 01111 101 01111 0010011	0x0307d793
SLLI (Shift Left local Immediate)	a3, a1, 0x8	I	imm[11:0] | rs1[19:15] | funct3[14:12] | rd[11:7] | opcode[6:0]	000000001000 01011 001 01101 0010011	0x00859693
BNE (Branch if Not equal)	bne a5, a3, 10538	B	imm[12|10:5] | rs2[24:20] | rs1[19:15] | funct3[14:12] | imm[4:1|11] | opcode[6:0]	000001 01111 10001 001 0010 1100011	0xead798e3
LH (Load Halfword)	a5,18(a5)	I	imm[11:0] | rs1[19:15] | funct3[14:12] | rd[11:7] | opcode[6:0]	000000010010 01111 001 01111 0000011	0x01279783
LUI (Load Upper Immediate)	lui a2, 0x1	U	imm[31:12] | rd[11:7] | 0110111	00000000000000000001 01010 0110111	0x00001637
ADDI (ADD Immediate)	sp, sp, -16	I	imm[11:0] | rs1[19:15] | funct3[14:12] | rd[11:7] | opcode[6:0]	111111111000 00010 000 00010 0010011	0xff010113
SD (Store Doubleword)	ra, 8(sp)	S	imm[11:5] | rs2[24:20] | rs1[19:15] | funct3[14:12] | imm[4:0] | opcode[6:0]	0000000 00001 00010 011 01000 0100011	0x00113423
JAL (Jump and Link)	ra, 1040c <printf>	J	imm[20] | imm[10:1] | imm[11] | imm[19:12] | rd[11:7] | opcode[6:0]	00000011010000000001 1101111	0x340000ef
AUIPC (Add upper Immediate to PC)	a5, 0xffff0	U	imm[31:12] | rd[11:7] | opcode[6:0]	11111111111111110000 01111 0010111	0xffff0797
ADD (addition)	s0,a5,s0	R	funct7[31:25] | rs2[24:20] | rs1[19:15] | funct3[14:12] | rd[11:7] | opcode[6:0]	0000000 01000 01111 000 01000 0110011	0x00878433
SUB (Subtraction)	a2, a2, a0	R	funct7[31:25] | rs2[24:20] | rs1[19:15] | funct3[14:12] | rd[11:7] | opcode[6:0]	0100000 01010 01100 000 01100 0110011	0x40a60633