

R-Type instructions:

- Addition (add): 000_sss_ttt_ddd_0_000
- Subtraction (sub): 000_sss_ttt_ddd_0_001
- Shift Left Logical (sll): 000_sss_ttt_ddd_1_010
- Shift Right Logical (srl): 000_sss_ttt_ddd_1_011
- Logical AND (and): 000_sss_ttt_ddd_0_100
- Logical OR (or): 000_sss_ttt_ddd_0_101
- Logical XOR (xor): 000_sss_ttt_ddd_0_110
- Shift Right Arithmetic (sra): 000_sss_ttt_ddd_1_111

I-Type instructions:

- Add Immediate (addi): 000_sss_ttt_iii_iii_i
- Load Word (lw): 001_sss_ttt_iii_iii_i
- Store Word (sw): 010_sss_ttt_iii_iii_i
- Branch On Equal (beq): 011_sss_ttt_iii_iii_i
- Logical AND (andi): 100_sss_ttt_iii_iii_i
- Branch On Not Equal (bne): 101_sss_ttt_iii_iii_i

J-Type instructions:

- Jump (j): 111_iii_iii_iii_iii_i