

```

rst <= '0'
load_pc <= '1'
mem_read <= '1'
mem_write <= '0'
add_src <= "000"
data_src <= "00"
load_ir <= '0'
A_src <= "00"
B_src <= "00"
in_en <= '0'
load_A <= '0'
load_B <= '0'
alu_src1 <= inst[3-2]
alu_src2 <= inst[1-0]
aluop <= "001"
R_src <= "00"
load_r <= '0'
out_src <= "00"
load_out <= '0'
load_flag <= '1'
jmp <= '0'
jeq <= '0'
jgr <= '0'

```

