The instructions demonstrated by the Multi-Cycle Simulator include:

Example Meaning

add $1, $2, $3 $1 = $2 + $3

sub $1, $2, $3 $1 = $2 - $3

and $1, $2, $3 $1 = $2 & $3

or $1, $2, $3 $1 = $2 | $3

mult $1, $2, $3 $1 = $2 \* $3

addi $1, $2, 13 $1 = $2 + 13

beq $1, $2, 13 if ($1 == $2) goto PC + 1 + 13

bne $1, $2, 13 if ($1 !== $2) goto PC + 1 + 13

lw $1, 13 ($2) $1 = Memory ( $2 + 13 )

sw $1, 13 ($2) Memory ( $2 + 13 ) = $1