

MIPS Assembly/Pseudoinstructions

The MIPS instruction set is very small, so to do more complicated tasks we need to employ assembler macros called **pseudoinstructions**.

List of Pseudoinstructions

The following is a list of the standard MIPS instructions that are implemented as pseudoinstructions:

- blt
- bgt
- ble
- blt
- bge
- li
- move

Branch Pseudoinstructions

Branch if less than (blt)

The **blt** instruction compares 2 registers, treating them as signed integers, and takes a branch if one register is less than another.

```
blt $8, $9, 4
```

translates to

```
slt $1, $8, $9  
bne $1, $0, 4
```

Other Pseudoinstructions

Load Immediate (li)

The **li** pseudo instruction loads an immediate value into a register.

```
li $1, 0x3BF20
```

translates to

```
lui $2, 0x0003  
ori $1, $2, 0xBF20
```

Move (move)

The move pseudo instruction moves the contents of one register into another register.

```
move $1, $2
```

translates to

```
add $1, $2, $0
```

Article Sources and Contributors

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