

Name	Use
\$zero	Holds constant value of 0
\$a0-\$a3	Argument values
\$v0-\$v1	Function results
\$t0-\$t9	Temporary values
\$s0-\$s7	Saved values
\$gp	Global pointer
\$sp	Stack pointer
\$fp	Frame pointer
\$ra	Return address

Table 1: MIPS Registers

Instruction	Description
<i>add</i> rd, rs, rt	store $rs + rt$ in rd
<i>addi</i> rd, rs, imm	store $rs + \text{imm}$ into rd
<i>sub</i> rd, rs, rt	store $rs - rt$ in rd
<i>mul</i> rd, rs, rt	store $rs * rt$ in rd
<i>div</i> rd, rs, rt	store rs / rt in rd
<i>neg</i> rd, rs	store $-rs$ in rd
<i>seq</i> rd, rs, rt	store 1 in rd if rs equals rt, 0 otherwise
<i>sne</i> rd, rs, rt	store 1 in rd if rs not equal rt, 0 otherwise
<i>slt</i> rd, rs, rt	store 1 in rd if rs less than rt, 0 otherwise
<i>sgt</i> rd, rs, rt	store 1 in rd if rs greater than rt, 0 otherwise
<i>sle</i> rd, rs, rt	store 1 in rd if rs less than or equal rt, 0 otherwise
<i>sge</i> rd, rs, rt	store 1 in rd if rs greater than or equal rt, 0 otherwise
<i>sll</i> rd, rs, amt	store value from rs shifted left by amt into rd
<i>beqz</i> rd, label	conditional branch to label if rd equal 0
<i>bgtz</i> rd, label	conditional branch to label if rd greater than 0
<i>b</i> label	unconditional branch to label
<i>li</i> rd, constant	load the constant into rd
<i>la</i> rd, address	load computed address (not contents) into rd
<i>lw</i> rd, address	load word from address into rd
<i>lb</i> rd, address	load byte from address into rd
<i>sw</i> rd, address	store word from rd into address
<i>sb</i> rd, address	store byte from rd into address
<i>jal</i> label	jump and link to label
<i>jr</i> rd	jump to address in rd
<i>move</i> rd, rs	move value in rs to rd

Table 2: MIPS Instructions

Service	Code
print integer	1
print string	4
read integer	5

Table 3: MIPS System Calls. Put the argument in register \$a0 and the code into register \$v0 prior to doing `syscall`.