Abstract (Easy) Machine Instructions

Halt	halt
1/0	<pre>write <argument> read_boolean <address> read_integer <address></address></address></argument></pre>
Jump	<pre>pc := <address> if <argument> pc := <address> if not <argument> pc := <address></address></argument></address></argument></address></pre>
Move	<pre><register> := <register> contents <address> := contents <address></address></address></register></register></pre>
Immediate Data Move	<pre><argument> := <number> <argument> := - <number></number></argument></number></argument></pre>
Load	<register> := contents <address></address></register>
Store	contents <address> := <register></register></address>
ALU Arithmetic	<pre><register> := <register> = <register> <register> := <register> /= <register> <register> := <register> < <register> <register> := <register> <= <register></register></register></register></register></register></register></register></register></register></register></register></register></pre>
Argument Arithmetic	<pre><register> := <argument> and <argument> <register> := <argument> or <argument> <register> := not <argument> <register> := <argument> + <argument> <register> := <argument> - <argument> <register> := <argument> * <argument> <register> := <argument> / <argument> <register> := <argument> / <argument> <register> := <argument> / <argument> <register> := - <argument></argument></register></argument></argument></register></argument></argument></register></argument></argument></register></argument></argument></register></argument></argument></register></argument></argument></register></argument></register></argument></argument></register></argument></argument></register></pre>

Arguments

<register>
contents <address>

Registers

b Base (in reality: R0)

r <number> Regular

Abstract Machine Instructions

Addresses (use combinations)

b Base

r <number> Register

<number> Displacement

Allowed combinations:

D

b, r < number >

b, r <number>, <number>

r < number >

r <number>, <number>

b, <number><number>