Brian Cullinan

CS 481 HW8

11/03/08

|  |  |  |  |
| --- | --- | --- | --- |
| Mnemonic | Opcode | Other bytes | Description |
| 32load | 0A | *value* | Loads a 32 bit *value* onto the stack |
| 64load | 1A | *value, value* | Loads a 64 bit *value* onto the stack |
| save | 2A | level | Pushes all local variables in the same *level* on to the stack |
| load | 2B | *level* | Pops all local variables in the same *level* off the stack |
| move | 2C | position | Moves variable from position on the stack into local frame |
| jump | 3A | command *location* | Jumps to a specified command *location* |
| jumpif | 3B | *condition*, *location* | Jumps to a specific *location* if the value of *condition* is true |
| call | 3C | *location* | Saves the local frame and jumps to a specific location in the execution |
| return | 3D |  | Returns to last location saved on stack and loads the previous variable frame |
| gload | 4A | *value* | Loads *value* into the local frame from global memory |
| gsave | 4B | *index* | Saves *index* in the stack in global memory |
| push | 5A | *value* | Pushes *value* on to the stack |
| pop | 5B | *value* | Pops *value* off the stack into local frame |
| peek | 5C | *Value* | Reads *value* into local frame making it accessible |
| add | 7A | *Value1, value2* | Adds the two values together and pushes the answer on the stack |
| sub | 7B | *Value1, value2* | Subtracts two values and pushes the answer on the stack |
| xor | 6A | *Value1, value2* | Exclusive or the two values and pushes the answer on the stack |
| or | 6B | *Value1, value2* | Or the values and push answer on the stack |
| and | 6C | *Value1, value2* | And the values and push them on to the stack |
| not | 6D | *Value* | Not the value and leave it where it is |
| mul | 7C | *Value1, value2* | Multiply the two values and push on to stack |
| div | 7D | *Value1, value2* | Divide two values and push on to stack |
| pow | 7E | *Value, exponent* | Multiple value to the power of exponent |
| noop | 00 |  | Don’t do anything |