The Little Man Computer – Reference

The little man’s instruction set: These are all the instructions the little man can execute.

|  |  |  |
| --- | --- | --- |
| Instruction | Mnemonic | Machine Code |
| Load | LDA | 5xx |
| Store | STA | 3xx |
| Add | ADD | 1xx |
| Subtract | SUB | 2xx |
| Input | INP | 901 |
| Output | OUT | 902 |
| End | HLT | 000 |
| Branch if zero | BRZ | 7xx |
| Branch if zero or positive | BRP | 8xx |
| Branch always | BRA | 6xx |
| Data storage | DAT |  |

xx refers to a Mailbox number (Memory Address)

**Example (Using Machine Code)**

|  |  |  |
| --- | --- | --- |
| **Address** | **Instruction** | **What it does:** |
| **Mnemonic** | **Machine Code** |
| 00 | INP | 901 | Input a number and put it in the calculator |
| 01 | STA 99 | 399 | Store the number in the calculator in memory slot 99 |
| 02 | INP | 901 | Input a number and put it in the calculator |
| 03 | ADD 99 | 199 | Add the number in memory slot 99 to the number in the calculator |
| 04 | OUT | 902 | Output the number which is now in the calculator |
| 05 | HLT | 000 | Halt |