

LMC Instruction Set

Note that in the following table “xx” refers to a memory address (aka mailbox) in the RAM. The online LMC simulator has 100 different mailboxes in the RAM ranging from 00 to 99.

Mnemonic	Name	Description	Op Code
INP	INPUT	Retrieve user input and stores it in the accumulator.	901
OUT	OUTPUT	Output the value stored in the accumulator.	902
LDA	LOAD	Load the Accumulator with the contents of the memory address given.	5xx
STA	STORE	Store the value in the Accumulator in the memory address given.	3xx
ADD	ADD	Add the contents of the memory address to the Accumulator	1xx
SUB	SUBTRACT	Subtract the contents of the memory address from the Accumulator	2xx
BRP	BRANCH IF POSITIVE	Branch/Jump to the address given if the Accumulator is zero or positive.	8xx
BRZ	BRANCH IF ZERO	Branch/Jump to the address given if the Accumulator is zero.	7xx
BRA	BRANCH ALWAYS	Branch/Jump to the address given.	6xx
HLT	HALT	Stop the code	000
DAT	DATA LOCATION	Used to associate a label to a free memory address. An optional value can also be used to be stored at the memory address.	