

File Load and Save Menus.
Program can also be loaded by dragging and dropping them on the simulator

Input and Output Ports
To set Input port bits click on the bit
There are also buttons to Set of Clear All bits on the port.

Program Memory
To edit choose the Op Code from the Drop Down List. If the command takes a value can be chosen from the "Operand" Drop down.

Reset Sets the Program Counter back to the start and stops the program Running

Run Control
The program can be Manually Stepped through automatically Stepped.

Comments about the program. You can keep notes with the program These are saved with the program

The screenshot shows the NEMicro simulator interface. At the top left is a menu bar with 'File' and 'About'. Below it is a 'Run Control' section with 'Manual' and 'Automatic' modes. The 'Manual' mode includes a 'Step' button and a 'Reset' button. The 'Automatic' mode includes a 'Run' button and a 'Run Speed' slider. Below the run controls is a 'Program Comments' text area. At the bottom left is an 'Event History' log with a 'Clear' button. The main area is divided into several sections: 'Input Port 0' and 'Output Port 0' each with 8-bit displays and 'Clear All to 0' and 'Set All to 1' buttons; 'Accumulator' (displaying 00000111), 'Program Counter' (displaying 0005), and 'Flags' (displaying a black box); 'Program Memory' with a table of addresses, op codes, and operands; 'RAM' with a table of addresses, binary, and hex values; 'Memory Control' with 'Clear PRDM' and 'Clear RAM' buttons; and 'DataScope' with a grid and a 'Switch Off' button. The 'DataScope' shows a timing diagram for ports D7 through D0.

Address	Op Code	Operand
0000	LDA	2
0001	OUT0	2
0002	ADD	2
0003	INR	
0004	STA	2
0005	LDA	1
0006	DCR	
0007	STA	1
0008	JZ	10
0009	JMP	0
0010	LDA	0
0011	STA	1
0012	LDA	3
0013	STA	2
0014	JMP	0
0015	NOP	
0016	NOP	
0017	NOP	
0018	NOP	
0019	NOP	

Address	Binary	Hex
0000	00000111	07
0001	00000110	06
0002	00000111	07
0003	00000001	01

RAM

Memory Control

Clear PRDM

Clear RAM

DataScope

Show Grid

Switch Off

Clear Data

D7

D6

D5

D4

D3

D2

D1

D0

01 03 07 0F 1F 3F 7F 01 03 07 0F 1F 3F 7F 01 03

Data Memory RAM

Controls to Clear Data Memory and Program Memory

Log Showing each program step and the effect it had on the Accumulator, Output port and Program Counter

The Processors Accumulator, Flags Register and Program Counter

Data Scope that shows the data on Output Port zero.