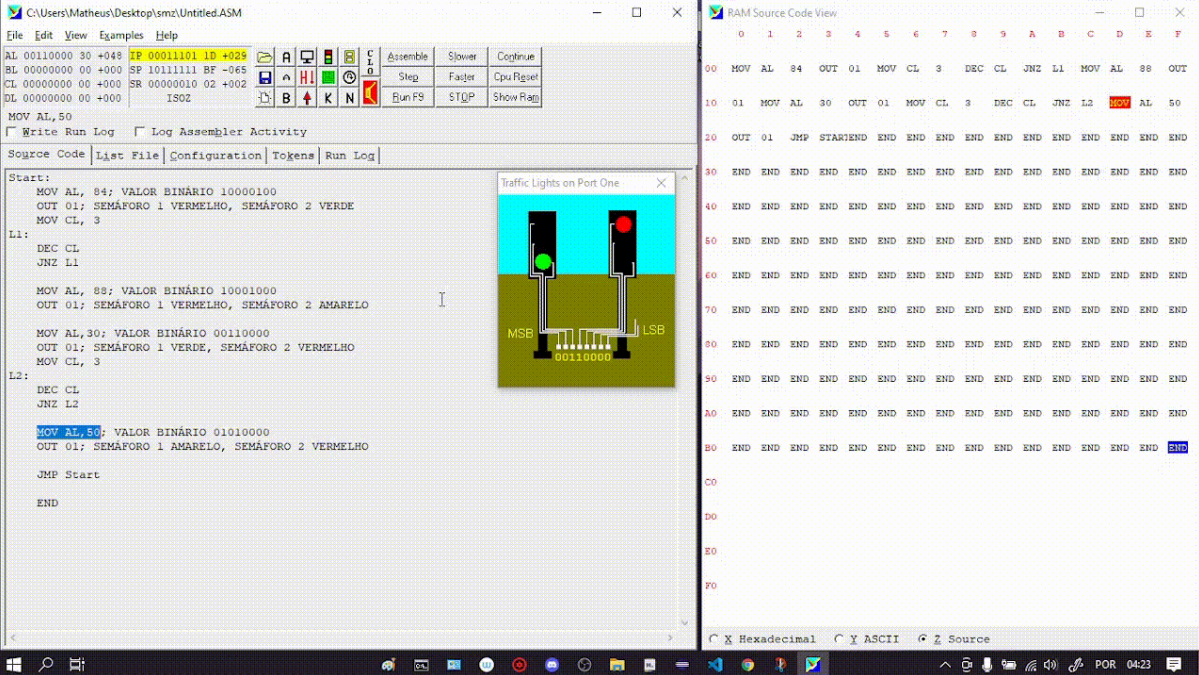


RESPOSTAS

Semáforo em Assembly:



The screenshot displays an assembly program for a traffic light simulation. The main window shows the assembly code with comments in Portuguese. A small window titled "Traffic Lights on Port One" shows a visual representation of two traffic lights, one green and one red, with a binary value "00110000" displayed below them. A second window, "RAM Source Code View", shows the memory layout of the program, with addresses 00 to FF and corresponding assembly instructions.

```
Start:
MOV AL, 84; VALOR BINÁRIO 10000100
OUT 01; SEMÁFORO 1 VERMELHO, SEMÁFORO 2 VERDE
MOV CL, 3
L1:
DEC CL
JNZ L1

MOV AL, 88; VALOR BINÁRIO 10001000
OUT 01; SEMÁFORO 1 VERMELHO, SEMÁFORO 2 AMARELO
MOV CL, 3
L2:
DEC CL
JNZ L2

MOV AL, 50; VALOR BINÁRIO 01010000
OUT 01; SEMÁFORO 1 VERDE, SEMÁFORO 2 VERMELHO
MOV CL, 3

JMP Start

END
```

The RAM Source Code View window shows the following instructions:

Address	Instruction
00	MOV AL, 84 OUT 01 MOV CL, 3 DEC CL JNZ L1 MOV AL, 88 OUT
10	01 MOV AL, 80 OUT 01 MOV CL, 3 DEC CL JNZ L2 MOV AL, 50
20	OUT 01 JMP STARTEND END END END END END END END END
30	END END END END END END END END END END END END END
40	END END END END END END END END END END END END END
50	END END END END END END END END END END END END END
60	END END END END END END END END END END END END END
70	END END END END END END END END END END END END END
80	END END END END END END END END END END END END END
90	END END END END END END END END END END END END END
A0	END END END END END END END END END END END END END
B0	END END END END END END END END END END END END END
C0	END
D0	
E0	
F0	

Código desenvolvido:

Start:

MOV AL, 84;

OUT 01;

MOV CL, 3

L1:

DEC CL

JNZ L1

MOV AL, 88;

OUT 01;

MOV AL, 30;

OUT 01;

MOV CL, 3

L2:

DEC CL

JNZ L2

MOV AL, 50;

OUT 01;

JMP Start

END