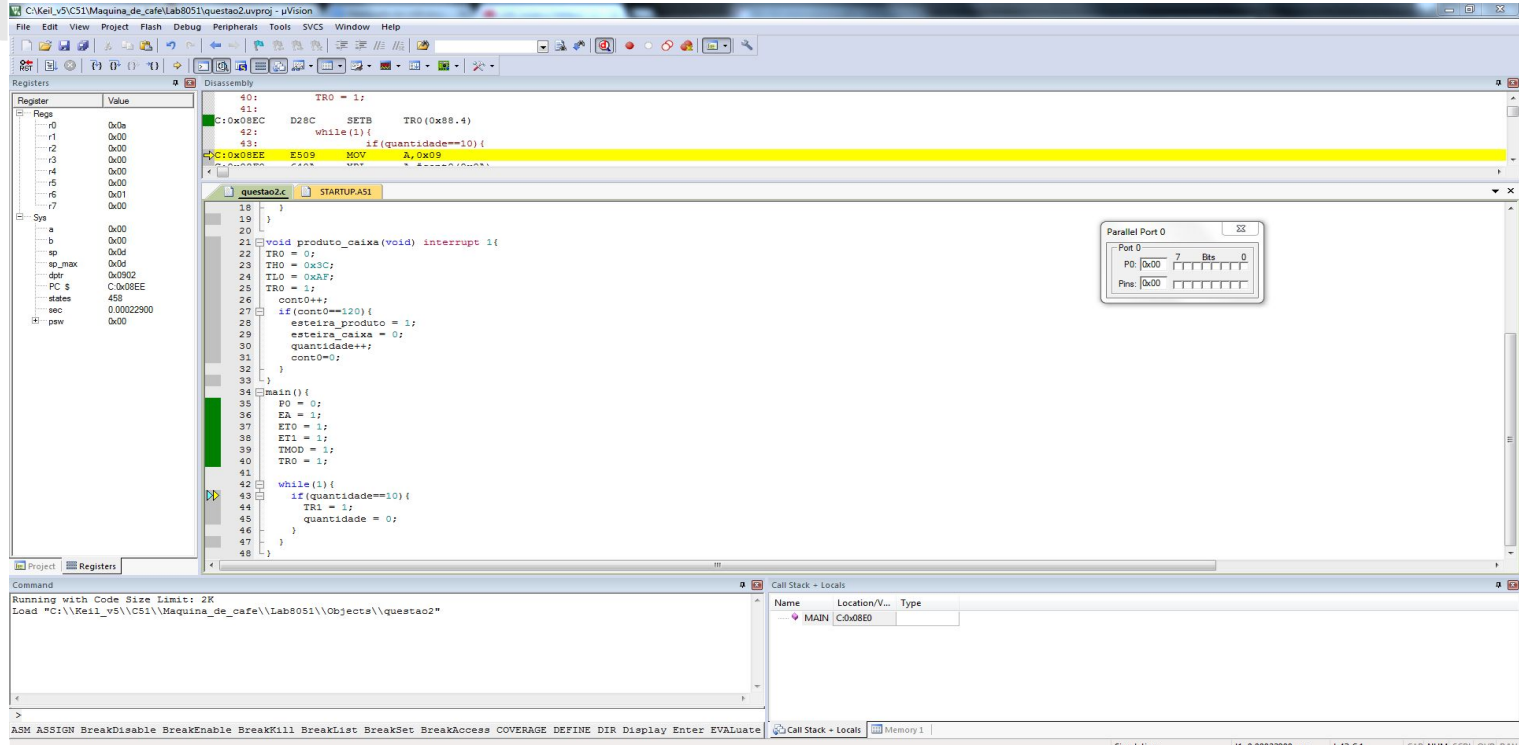


Questão 2

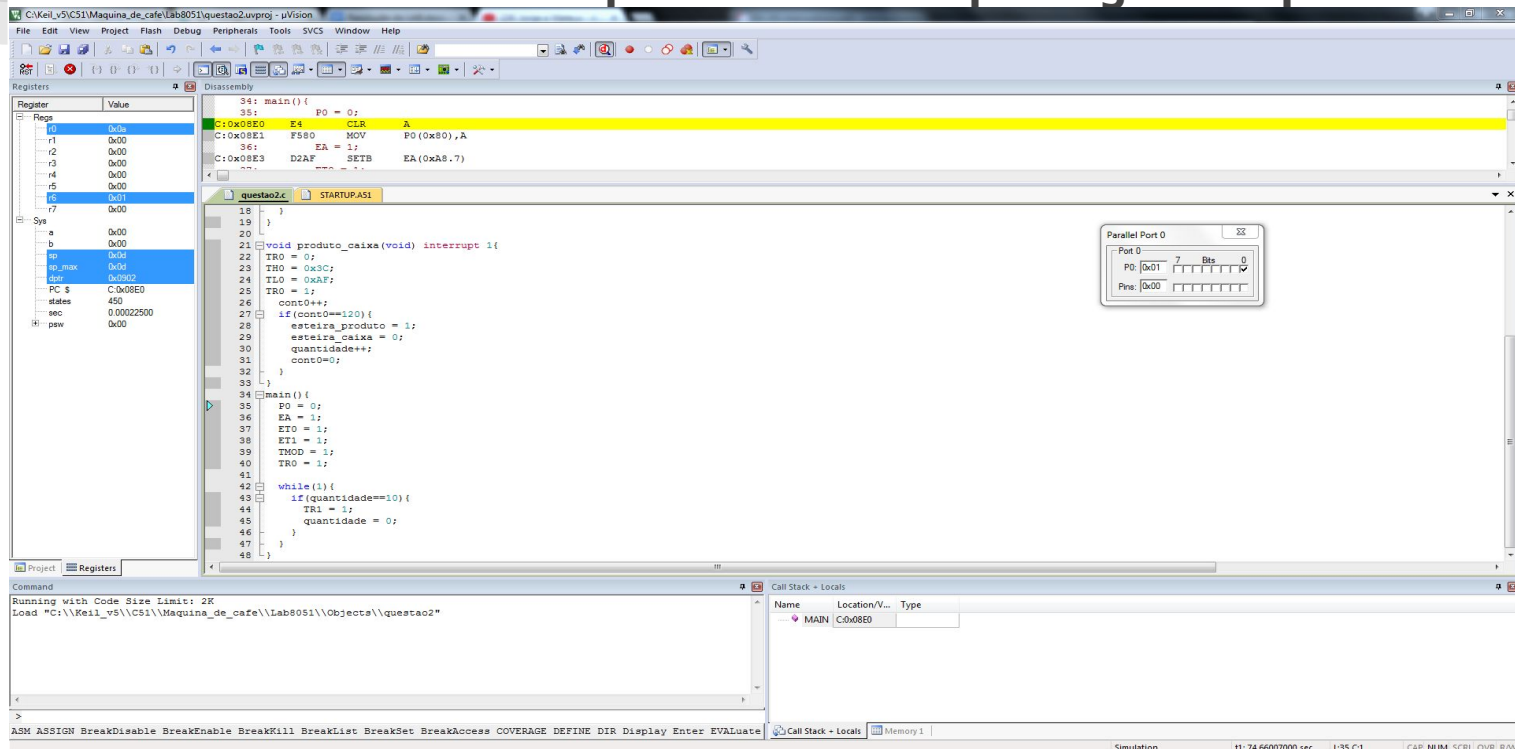
Etapas de execução do programa:



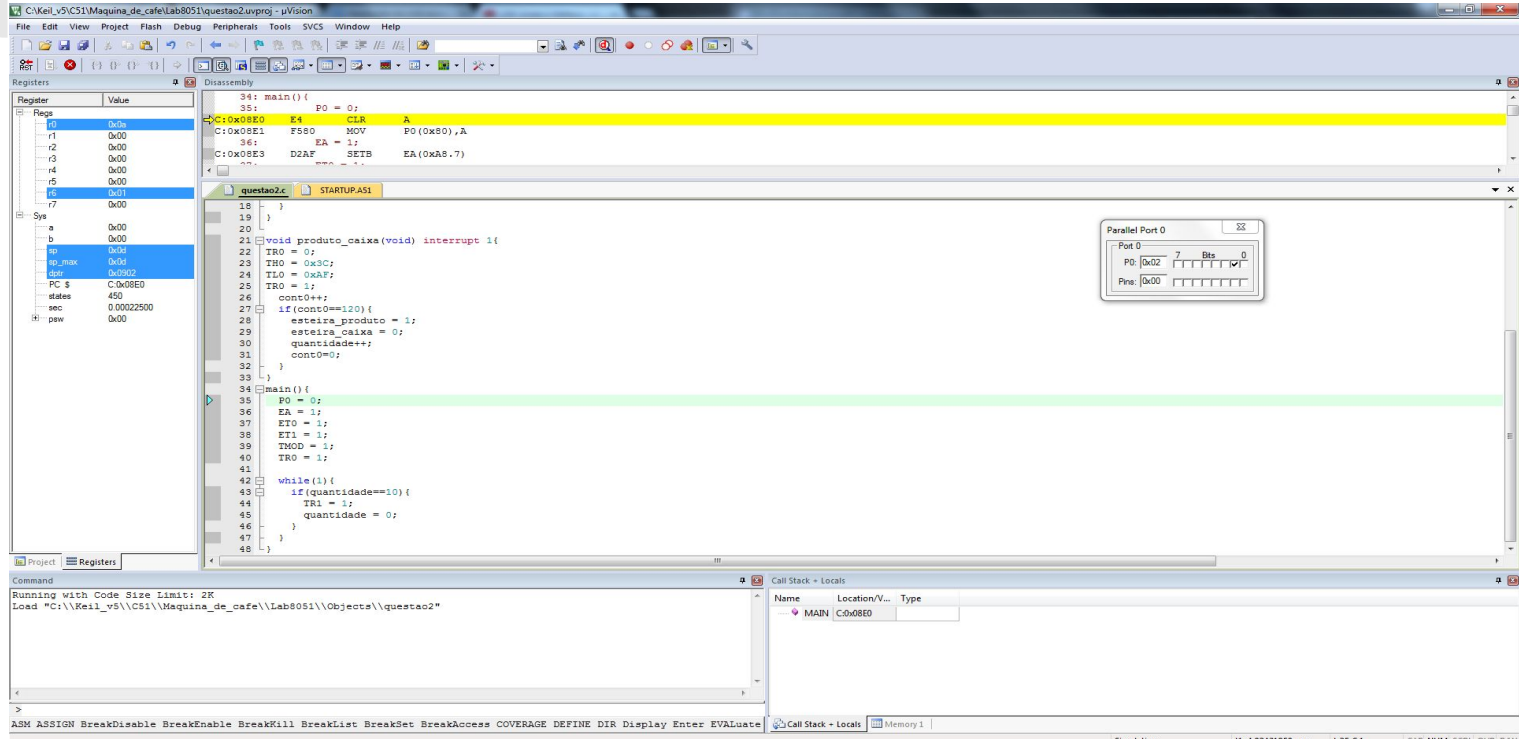
1. No começo da execução, a porta P0 recebe valor 0 (zero), e a interrupção interna é acionada.



2. durante a execução, a porta P1.0 fica acionada enquanto a caixa não estiver cheia para sinalizar a passagem de produtos.



4. Quando a caixa estiver cheia, a porta P1.0 é desligada e a porta P1.1 é acionada.



The screenshot displays the Keil uVision IDE interface with the following components:

- Registers:** A table showing the current state of registers. The PC register is highlighted at 0x00E0.
- Assembly:** The assembly code for the program, showing instructions for setting up the parallel port and the main function.
- C Code:** The C code for the program, showing the main function and an interrupt service routine for the parallel port.
- Command:** The command to load the program, showing the path to the program file.
- Call Stack:** A window showing the current function being executed, which is the main function.

Assembly Code:

```
34: main() {
35:     PO = 0;
36:     CLR EA;
37:     MOV PO(0x80), A;
38:     SETB EA;
39:     SETB EA(0xA8.7);
40: }
```

C Code:

```
18: }
19:
20: void produto_caixa(void) interrupt 1 {
21:     TR0 = 0;
22:     TH0 = 0x3C;
23:     TL0 = 0xAF;
24:     TR0 = 1;
25:     cont0++;
26:     if(cont0==120){
27:         esteira_produto = 1;
28:         esteira_caixa = 0;
29:         quantidade++;
30:         cont0=0;
31:     }
32: }
33:
34: main() {
35:     PO = 0;
36:     EA = 1;
37:     ETO = 1;
38:     ET1 = 1;
39:     TH0 = 1;
40:     TR0 = 1;
41:
42:     while(1){
43:         if(quantidade==10){
44:             TR1 = 1;
45:             quantidade = 0;
46:         }
47:     }
48: }
```

Command:

```
Running with Code Size Limit: 2K
Load "C:\Keil_v5\CS1\Maquina_de_cafe\Lab8051\Objects\questao2"
```

Call Stack:

Name	Location/V...	Type
MAIN	C:\0x08E0	