

16-BIT SUBTRACTION:

The screenshot displays an 8085 assembly simulator interface. On the left, the register status is shown with values for C, E, L, W, C, P, and Reg. The central pane shows the assembly code with line numbers 1 through 13. The code performs a 16-bit subtraction using the RST 1 instruction. The right pane shows the memory dump starting at address 8500, with data values for addresses 2134 through 2145. The bottom pane shows the assembler message: "Program assembled successfully".

Registers: C 02 05, E 09 00, L 00 00, W 00 00, C 42 19, P FF FF, Reg 00 00. Flags: S 0, Z 0, AC 0, P 0, C 0.

Assembly Code:

```
1 LDA 8500
2 MOV B, A
3 LDA 8501
4 MOV C, A
5 LDA 8502
6 MOV D, A
7 LDA 8503
8 SUB C
9 STA 8505
10 MOV A, D
11 SUB B
12 STA 8504
13 RST 1
```

Memory Dump:

Address (Hex)	Address	Data
2134	8500	2
2135	8501	5
2136	8502	9
2137	8503	8
2138	8504	7
2139	8505	3
213A	8506	0
213B	8507	0
213C	8508	0
213D	8509	0
213E	8510	0
213F	8511	0
2140	8512	0
2141	8513	0
2142	8514	0
2143	8515	0
2144	8516	0
2145	8517	0

Assembler Message: 0 Program assembled successfully