Unsigned 8-bit Addition with 16-bit result

Write a program to find the unsigned sum of 8 bit variables A and B. For this programming problem the sum may be greater than 255 if A and B. Store the sum into 16 bit variable C using little endian byte ordering.

C = A + B

Simulation of the unsigned problem C = 255 + 85, where the answer C should equal 340 (0x154). The solution results in a carry condition after the first addition.

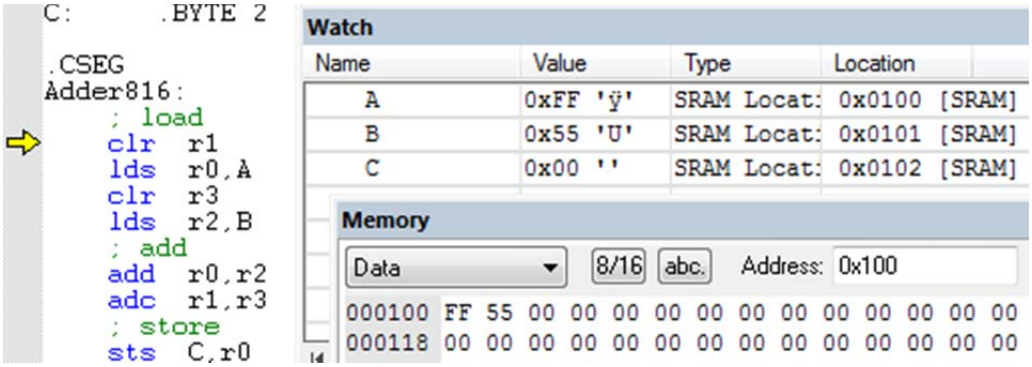

Figure 1 Start of 8-bit Addition program with variable A initialized to 0xFF (255_{10} unsigned) and B initialized to 0x55 (85_{10} signed).

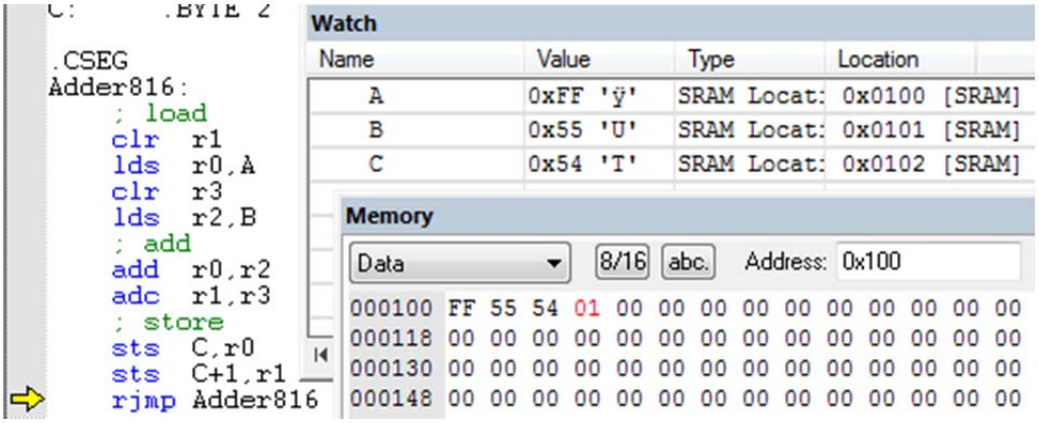

Figure 2 End of Addition program with variable C containing 0x0154 (340_{10}). Byte ordering is little endian.