

### Program 3

Program to add N one byte numbers.

PROGRAM	ALGORITHM
START: LXI H, F100 MOV C, M SUB A MOV B,A LOOP: INX H ADD M JNC LOOP1 INR B LOOP1: DCR C JNZ LOOP MOV H,B MOV L,A SHLD F200 CALL UPDAD HLT	STEP 1: Initialize the starting address of the Data block STEP 2: Initialize the count. STEP 3: Initialize the initial sum to zero. STEP 4: Add the data bytes one by one. STEP 5: Increment the memory pointer one by One for one each addition. STEP 6: Decrement the count by one for each Condition. Check for zero condition. STEP 7: If the count is not zero, repeat step 4 to 6. STEP 8: If the count is zero halt the processor.

BEFORE EXECUTION:	
Data Addr.	Data
F101	01
F102	02
F103	03
F104	04

Result Addr.	Data
F200	0A
F201	00