```
18
19 ;-------------------------------------------------------------------
20          .data
21 array1:  .byte 3, -37, 17, 11
22 sum:     .space 1
23 avg:     .space 1
24
25
26 RESET    mov.w   #__STACK_END,SP          ; Initialize stackpointer
27 StopWDT  mov.w   #WDTPW|WDTHOLD,&WDTCTL   ; Stop watchdog timer
28
29
30
31 ;-------------------------------------------------------------------
32 ; Main loop here
33 ;-------------------------------------------------------------------
34
35 ; Task 1
36          clr.b   R4                   ; R4 is index
37          clr.b   R5                   ; clear!
38
39          mov.b   #0,        R4        ; R4 is index
40          mov.b   #0,        R5        ; Initializing R5
41          add.b   &array1,   R5        ; R5 <- 3
42          add.b   &array1+1, R5        ; R5 <- R5 + -37
43          add.b   &array1+2, R5        ; R5 <- R5 + 17
44          add.b   &array1+3, R5        ; R5 <- R5 + 11
45
46          mov.b   R5, &sum             ; sum <- R5
47
48          rra.b   R5                   ; R5 / 2
49          rra.b   R5                   ; R5 / 2
50
51          add.b   R5, &avg             ; avg <- R5
52
```

0x2400 - array1 <Memory Rendering 22> ⊠

| 8-Bit Binary | ∨ |

```
0x002400  array1
0x002400  00000011 11011011 00010001 00001011
0x002404  sum
0x002404  11111010
0x002405  avg
0x002405  11111110
```

0x2400 - array1 <Memory Rendering 21> ⊠

| 8-Bit Signed Int | ∨ |

```
0x002400  array1
0x002400  3      -37    17     11
0x002404  sum
0x002404  -6
0x002405  avg
0x002405  -2
```

```
53
54 ; Task 2
55          clr.b    R4
56
57          mov.b    #0xB4, &0x1C11        ; 0x1C11 <- 0xB4
58          mov.b    #0xFA, &0x1C12        ; 0x1C12 <- 0xFA
59          mov.b    #0x1C, &0x1C13        ; 0x1C13 <- 0x1C
60          mov.b    #0xAB, &0x1C14        ; 0x1C14 <- 0xAB
61          mov.b    #0x27, &0x1C15        ; 0x1C15 <- 0x27
62          mov.b    #0xD3, &0x1C16        ; 0x1C16 <- 0xD3
63          mov.b    #0x95, &0x1C17        ; 0x1C17 <- 0x95
64
65
66 main:
67          jmp      main
68          nop
69
```

0x1c10 - 0x1C11(-0x1) <Memory Rendering 24> ⊠

8-Bit Hex - C Style ⌄

```
0x001C10   0xDD 0xB4 0xFA 0x1C 0xAB 0x27 0xD3 0x95 0xE8
0x001C27   0xDB 0x5F 0xF3 0xFF 0x76 0xDF 0x8F 0x4E 0x63
0x001C3E   0x5E 0xA9 0xE7 0x3A 0x7F 0xDE 0xFF 0xBA 0xEF
0x001C55   0xFB 0xB9 0xE1 0xFF 0xE5 0xFB 0xC1 0x75 0xBA
```

0x1c10 - 0x1C11(-0x1) <Memory Rendering 24> ⊠

16-Bit Hex - C Style ⌄

```
0x001C10   0xB4DD 0x1CFA 0x27AB 0x95D3 0xBFE8 0x9DDF
0x001C30   0xF6DC 0x3F7F 0xF79F 0xB55F 0xDFFF 0x604D
0x001C50   0xF35B 0xF8D9 0xFBFD 0xE1B9 0xE5FF 0xC1FB
```