4+7+9+1 = 21

① 0110 0000 0010 0001 = 6021

Value = 4

0110 opCode = 4 | 0000 Rd | 0010 Ra | 0001 Rb → R1

LoadL R1, = 4

② 0110 0000 0011 0010 = 603a

Value = 7

0110 LoadL | 0000 opCode = 4 | 0011 Rd | 0010 Ra → R2

LoadL R2, = 7

③ 0010 0000 1100 0010 = 20ca

0010 Data | 0000 opCode = 4 | 1100 Rd → R3 | 0010 Ra → R2

Data R3 = R1 + R2 = 4 + 7 = 11

$\underbrace{4+7}_{R_3} + 9 + 1 = 21$ (16 bit)

Note. Imm 2 bytes

(4) 6 0 4 C

0110 0000 0100 1100 = (604C)

Load R_4, = 9

(5) 0010 0000 0101 1100 = (215C)

Data R_5, = $R_3 + R_4$ (ie: 4+7+9 = 20)

R_5 R_3 R_4

(6) 0110 0000 0000 1110 = (600e)

Load R_6 = R_6, = 1

(7) 0010 0001 1110 1110 = (21ee)

Data R_7 = $R_5 + R_6$ (ie: 4+7+9+1 = 21)

(8) Address = 8

1000 0000 0100 0111 = (8047)

Store M8, = R_7 (ie: m7 = 21)

11 + 12 = 23

(9) 0110 0000 0101 1000 = 6058
LoadL R0, = 11

(10) 0110 0000 0110 0001 = 6061
LoadL R1, = 12

(11) 0010 0000 1100 0001 = 20C1
Data R3, = R0 + R1 (ie: 11 + 12 = 23)

(12) 1000 0000 0101 0011 = 8053
Store M10, = R3 (ie: M10 = 23)

(13) M8(21) + M10(23) = M12(44)
0100 0000 0100 0100 = 4044
Load R4, M8 (ie: R4 = 21)

(14) 0100 0000 0101 0101 = 4055
Load R5, M10 (ie: R5 = 23)

(15) 0010 0000 1010 0101 = 2A95
Data R6 = R4 + R5 (ie: 21 + 23 = 44)

(16) 1000 0000 0110 0110 = (8066)

Store M_{12}, = F6 (i.e. M_{12} = 44)