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```
// As the user, set register values
// X1 = 4000

// As the user, set memory locations (ML)
// ML 4000 = 30 ("b" value)
// ML 4008 = 40 ("c" value)
// ML 4016 = 50 ("d" value)
// ML 4024 = 60 ("e" value)

// load memory location values into registers
LDUR X3,[X1,#0]   // loading memory location "b" into X3
LDUR X4,[X1,#8]   // X4 = c = 40
LDUR X5,[X1,#16]  // X5 = d = 50
LDUR X6,[X1,#24]  // X6 = e = 50

// Solve for (a = b + c + d - e)
ADD X2,X3,X4  // X2 = X3 + X4 = 70
ADD X2,X2,X5  // X2 = X2 + X5 = 120
SUB X2,X2,X6  // X2 = X2 - X6 = 60

// "a" or X2 written to memory location 4032
STUR X2,[X1,#32]
```

Assembly

```
 Line 9
Line 10 // load memory location values into r
Line 11 LDUR X3,[X1,#0]   // loading memory l
Line 12 LDUR X4,[X1,#8]   // X4 = c = 40
Line 13 LDUR X5,[X1,#16]  // X5 = d = 50
Line 14 LDUR X6,[X1,#24]  // X6 = e = 50
Line 15
Line 16 // Solve for (a = b + c + d - e)
Line 17 ADD X2,X3,X4  // X2 = X3 + X4 = 70
Line 18 ADD X2,X2,X5  // X2 = X2 + X5 = 120
Line 19 SUB X2,X2,X6  // X2 = X2 - X6 = 60
Line 20
Line 21 // "a" or X2 written to memory locati
Line 22 STUR X2,[X1,#32]
```

Registers

| | |
|---|---|
| X1 | 4000 |
| X2 | 60 |
| X3 | 30 |
| X4 | 40 |
| X5 | 50 |
| X6 | 60 |
| X7 | 0 |
| X30 | 0 |

Memory

| | |
|---|---|
| 4000 | 30 |
| 4008 | 40 |
| 4016 | 50 |
| 4024 | 60 |
| 4032 | 60 |
| 5048 | 0 |
| 5056 | 0 |