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ECGR 3183 – Computer Org.

Project #1

Source Code:

```
// Project 1 -- Johnny Nguyen

LDUR X2, [X1, #0] // Load X1,M[0] into X2
LDUR X3, [X1, #8] // Load X1,M[8] into X3
LDUR X4, [X1, #16]
LDUR X5, [X1, #24]

ADD X6, X2, X3 // a = b + c + d - e
ADD X6, X6, X4
SUB X6, X6, X5
STUR X6, [X1, #32] // Store X6 into X1,M[32]
```

Simulation

Assembly

```
Line 1 LDUR X2, [X1, #0] // Load X1,M[0] into X2
Line 2 LDUR X3, [X1, #8] // Load X1,M[8] into X3
Line 3 LDUR X4, [X1, #16]
Line 4 LDUR X5, [X1, #24]
Line 5 ADD X6, X2, X3 // a = b + c + d - e
Line 6 ADD X6, X6, X4
Line 7 SUB X6, X6, X5
Line 8 STUR X6, [X1, #32] // Store X6 into X1,M[32]
```

Registers

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

Memory

4000	30
4008	40
4016	50
4024	60
4032	60

EXIT SIMULATION

START AGAIN