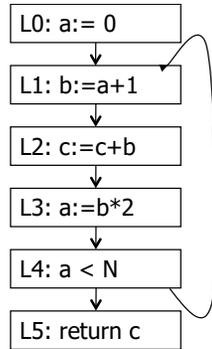


CSE401 – Dataflow Extravaganza Solutions

1. Although not requested in this specific problem, it helps to start by drawing the CFG, which is the same one used as an example in the lecture slides:



Here is the table with the GEN and KILL sets for each block, and the solutions to the dataflow equations starting at L0 for each pass. There are no changes in the third pass, so it is not shown here.

Block	GEN	KILL	IN (1)	OUT (1)	IN (2)	OUT (2)
L0	L0	L3	---	L0	---	L0
L1	L1	---	L0	L0,L1	L0, L1, L2, L3	L0, L1, L2, L3
L2	L2	---	L0, L1	L0, L1, L2	L0, L1, L2, L3	L0, L1, L2, L3
L3	L3	L0	L0, L1, L2	L1, L2, L3	L0, L1, L2, L3	L1, L2, L3
L4	---	---	L1, L2, L3	L1, L2, L3	L1, L2, L3	L1, L2, L3
L5	---	---	L1, L2, L3	L1, L2, L3	L1, L2, L3	L1, L2, L3

2.

