

Problem #2:

Variable **c**:

Def: 1, 8, 12

Use: 5,7,9,11,13,16,21

Possible data flows:

1->5, 1->7, 1->9, 1->11, 1->13, 1->16, 1->21,
8->5, 8->7, 8->9, 8->11, 8->13, 8->16, 8->21,
12->5, 12->7, 12->9, 12->11, 12->13, 12->16, 12->21,

Test#1: a=3, b=4, c=5

Dataflows covered: 1->5, 1->9, 1->13, 1->16, 1->21

Test#2: a=5, b=4, c=3

Additional Dataflows covered: 1->7, 8->9, 8->13, 8->16, 8->21, 8->5

Test#3: a=3, b=5, c=4

Additional Dataflows covered: 1->11, 12->13, 12->16, 12->21, 12->5, 12->9

Test#4: a=7, b=8, c=5

Additional Dataflows covered: 8->11

Test#5: a=2, b=2, c=2

Additional Dataflows covered: 12->7

Test#6: a=5, b=2, c=5

Additional Dataflows covered: 8->7

Test#7: a=1, b=5, c=5

Additional Dataflows covered: 12->11

Variable **type**:

Def: 2, 14, 17, 19, 22

Use: 15, 17, 18, 19, 20, 22, 24

Possible data flows:

2->15, 2->17, 2->18, 2->19, 2->20, 2->22, 2->24,
14->15, 14->17, 14->18, 14->19, 14->20, 14->22, 14->24,
17->15, 17->17, 17->18, 17->19, 17->20, 17->22, 17->24,
19->15, 19->17, 19->18, 19->19, 19->20, 19->22, 19->24,
22->15, 22->17, 22->18, 22->19, 22->20, 22->22, 22->24.

Test#1: a=3, b=4, c=5

Dataflows covered: 2->15, 2->18, 2->20, 2->22, 22->15, 22->18, 22->20, 22->22, 22->24.

Test#2: a=1, b=1, c=4

Additional Dataflows covered: 14->15, 14->24

Test#3: a=5, b=1, c=5

Additional Dataflows covered: 2->17, 17->15, 17->17, 17->18, 17->20, 17->24

Test#4: a=2, b=2, c=3

Additional Dataflows covered: 2->19, 19->15, 19->18, 19->20, 19->24

Test#5: a=3, b=4, c=6

Additional Dataflows covered: 2->24

Non-executable dataflows:

14->17, 14->18, 14->19, 14->20, 14->22, 17->19, 17->22, 19->17, 19->19, 19->22, 22->17, 22->19.