

```

MAXP: PROCEDURE(A, B, M);
DECLARE (A, B) FIXED /*/ READONLY /*/;
DECLARE M FIXED;
/*/ ASSUME '1'B; */
/*/ ATTAIN MAXFOUND: (M=A | M=B) & M>=A & M>=B; */

/*/ ATTAIN MAXFOUND; */
IF A >= B
THEN DO;
    /*/ A >= A BY ARITH; */
    /*/ A >= B; */
    M = A;
    /*/ M = A; M >= A; M >= B; */
    END;
ELSE DO;
    /*/ B >= A BY ARITH, ~(A >= B); */
    /*/ B >= B BY ARITH; */
    M = B;
    /*/ M = B; M >= A; M >= B; */
    END;

RETURN;
END;

```

Figure 16 A procedure that finds the maximum of two values

```

/*/ A < 0; */ <----- <-----
.
.
.
IF C>2
THEN DO;
    A = 5;
    END;
ELSE DO;
    .
    .
    .
    /*/ A+1 < 1 BY ARITH, A<0; */
    .
    .
    .
    END;
.
.
.
/*/ A+1 < 1 BY ARITH, A<0; -----

```

Figure 17 Reaching past an assignment statement in an IF statement