

```

1  LIBRARY IEEE;
2  USE IEEE.STD_LOGIC_1164.ALL;
3
4  ENTITY GEN_ARIGHT IS
5      PORT ( DATA1_IN : IN STD_LOGIC_VECTOR(31 DOWNT0 0) :=
        "000000000000000000000000100000000001";
6          RESULT : OUT STD_LOGIC_VECTOR(31 DOWNT0 0) :=
        "000000000000000000000000000000000000");
7  END GEN_ARIGHT;
8
9  ARCHITECTURE BEHAVIORAL OF GEN_ARIGHT IS
10
11      SIGNAL HOLDER : STD_LOGIC_VECTOR(32 DOWNT0 0) := "00000000000000000000000000000000";
12
13  BEGIN
14
15      GEN :
16          FOR N IN 31 DOWNT0 1 GENERATE
17              OTHER :
18                  ENTITY WORK.SLEFT(BEHAVIOR)
19                      PORT MAP(A => DATA1_IN(N), S => HOLDER(N));
20          END GENERATE GEN;
21      --
22      RESULT(30 DOWNT0 0) <= HOLDER(31 DOWNT0 1);
23      RESULT(31) <= HOLDER(31);
24  END BEHAVIORAL;

```