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1.  PORT( CLK: IN BIT;
2.      X  : IN INTEGER RANGE 15 DOWNT0 0;
3.      Z  : OUT INTEGER RANGE 15 DOWNT0 0);
4.  PROC1 : PROCESS(CLK)
5.  VARIABLE P : INTEGER RANGE 15 DOWNT0 0;
6.  BEGIN
7.      FOR X IN 0 TO 10 LOOP
8.          IF (X<3) THEN
9.              P := X;
10.         ELSEIF (X>5) THEN
11.             P := 14 - X;
12.         END IF;
13.     END LOOP;
14.     IF (P<7) THEN
15.         IF (X>7) THEN
16.             IF (P>2) THEN
17.                 Z <= P;
18.             END IF;
19.         END IF;
20.     END IF;
21. END PROCESS PROC1;
```