Problem 5—Billiards

Jackie Gleason has played a pool hustler in several films. However, billiards is a little different. Billiard tables have no pockets. Given the length and width of a table (in feet), you are to strike a ball at a corner of the table at an angle of 45° to the edge of the table. You are to compute the number of ricochets the ball will make against the table before it hits another corner (possibly the same as the starting corner).

INPUT SPECIFICATION. You will be given a set of input cases, each of which will be two unsigned positive decimal integers separated by exactly one space and followed by **<EOLN>**. The last input case will be followed by "0 0**<EOLN>**". These integers represent the length and width of the billiard table.

OUTPUT SPECIFICATION. The output cases should appear in the same order as the input cases. Each output case will be "Case *c*: There will be *r* ricochet(s)." (where *c* is the case number and *r* is the number of ricochets). **<EOLN>** follows each output case.

SAMPLE INPUT.
```
5•10<EOLN>
5•5<EOLN>
0•0<EOLN>
<EOF>
```

SAMPLE OUTPUT.
```
Case•1:•There•will•be•1•ricochet(s).<EOLN>
Case•2:•There•will•be•0•ricochet(s).<EOLN>
<EOF>
```