Algorithm 1 Euclid's algorithm

1: **procedure** EUCLID(a, b) ▷ The g.c.d. of a and b
2:     $r \leftarrow a \bmod b$**while** $r \neq 0$ **do**

     end
     We have the answer if r is 0
3:     $a \leftarrow b$
4:     $b \leftarrow r$
5:     $r \leftarrow a \bmod b$
6:
7:     **return** b ▷ The gcd is b
8: **end procedure**