1 exp

Algorithm 1 Euclid's algorithm ightharpoonup The g.c.d. of m and l1: **procedure** $\mathrm{Euclid}(m, l)$ $r \leftarrow m \bmod l$ while $r \neq 0$ do \triangleright We have the answer if r is 0 3: $m \leftarrow l$ 4: $l \leftarrow r$ 5: $r \leftarrow m \bmod l$ 6: 7: while $r \neq 0$ do \triangleright We have the answer if r is 0 $m \leftarrow l$ 8: $l \ \leftarrow r$ 9: $r \ \leftarrow m \bmod l$ 10: \triangleright The g.c.d. is l $\mathbf{return}\ l$ 11: