Algorithm STEEPEST-DESCENT

Input x^0 initial point

For $k = 0, 1, \ldots$

1. calculate $d^k = \nabla f(x^k)$
2. find η^k by line minimization
3. $x^{k+1} \rightarrow x^k - \eta^k d^k$

until stopping condition satisfied

Output x^{k+1}