Gradient Descent Routines

Simple

Input: step size γ
Input: starting point $\vec{a}_0$

Initialize $x^{(0)}, t = 0$
while *stopping criteria not met* **do**
  $\vec{a}_{n+1} = \vec{a}_n - \gamma \nabla F(\vec{a}_n)$
  $n \leftarrow n + 1$
end
return $\vec{a}_n$