Gradient Descent:

whatever

while (error) $> \varepsilon$ and iterations $< n_{iter}$:

calculate J & $\frac{\partial J}{\partial \theta}$ from θs.

$\theta = \theta - \alpha \frac{\partial J}{\partial \theta}$

$\frac{\partial J}{\partial \theta}$: Cost function Derivative with respect to θ

θ : model parameter

α : learning rate

ε : stopping value

n_{iter} : maximum number of iterations