

RANA NUR OKTAY - Sayısal Analiz Dersi 4. Ödev

$$\left[\frac{1}{n} \sum_{i=1}^n (\theta_0 + \theta_1 x_i - y_i) \cdot 1 = \frac{1}{3} [(-1) + (-2) + (-3)] = -2 \right.$$

$$\left[\frac{1}{n} \sum_{i=1}^n (\theta_0 + \theta_1 x_i - y_i) \cdot x_i = \frac{1}{3} [(-1) \cdot 0 + (-2) \cdot 1 + (-3) \cdot 2] = \frac{-8}{3} = -2,6 \right.$$

$$\left[\begin{aligned} \theta_0 &= \theta_0 - \alpha \frac{\partial J(\theta)}{\partial \theta_0} = 0,2 - (0,1) \cdot (-2) = 0,4 \end{aligned} \right.$$

$$\left[\begin{aligned} \theta_1 &= \theta_1 - \alpha \frac{\partial J(\theta)}{\partial \theta_1} = 0,26 - (0,1) \cdot (-2,6) = 0,52 \end{aligned} \right.$$

$$\left[\begin{aligned} \theta_0 &= \theta_0 - \alpha \frac{\partial J(\theta)}{\partial \theta_0} = 0,4 - (0,1) \cdot (-2) = 0,6 \end{aligned} \right.$$

$$\left[\begin{aligned} \theta_1 &= \theta_1 - \alpha \frac{\partial J(\theta)}{\partial \theta_1} = 0,52 - (0,1) \cdot (-2,6) = 0,78 \end{aligned} \right.$$