

$$J(\theta) = \frac{1}{2m} \sum_{i=1}^m (h_{\theta}(x_i) - y_i)^2$$

Musa Berat Ausaren  
02220224566

Ayman

$$\alpha = 0.1$$

$$\theta_j = \theta_j - \alpha \cdot \frac{\partial J(\theta)}{\partial \theta_j}$$

1. it

$$\theta_0 = 0,2 \quad \theta_1 = 0,26$$

2. it

$$\theta_0 = \frac{2}{10} + \frac{2}{10} = 0,4$$

$$\theta_1 = \frac{26}{100} + \frac{26}{100} = \frac{52}{100} = 0,52$$

3. it

$$\theta_0 = 0,4 \quad \theta_1 = 0,52$$

$$\theta_0 = 0,4 - (0,1 \cdot -2) = 0,6$$

$$\theta_1 = 0,52 - (0,1 \cdot -2,6) = 0,78$$