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2. ADIM: $\theta_0 = 0.2$ $\theta_1 = 0.26$ $h(x) = 0.2 + 0.26x$

x	h(x)	y	HATA
0	$0.2 + 0.26 \cdot 0 = 0.2$	1	-0.8
1	$0.2 + 0.26 \cdot 1 = 0.28$	2	-0.54
2	$0.2 + 0.26 \cdot 2 = 0.34$	3	-0.28

$$\text{Maliyetin Ortalaması} \rightarrow \frac{1}{2.3} \left((-0.8)^2 + (-0.54)^2 + (-0.28)^2 \right) = 0.1683$$

$$\frac{\partial J(\theta)}{\partial \theta_1} = \frac{1}{n} \sum_{i=1}^n (\theta_0 + \theta_1 x_i - y_i) \cdot x_i$$

$$\Rightarrow \frac{1}{3} \cdot \left((0.2 + 0.26 \cdot 0 - 1) \cdot 0 + (0.2 + 0.26 \cdot 1 - 2) \cdot 1 + (0.2 + 0.26 \cdot 2 - 3) \cdot 2 \right) = -2.03$$

$$\frac{\partial J(\theta)}{\partial \theta_0} = \frac{1}{n} \sum_{i=1}^n (\theta_0 + \theta_1 x_i - y_i) \cdot 1$$

$$\Rightarrow \frac{1}{3} \cdot \left((0.2 + 0.26 \cdot 0 - 1) + (0.2 + 0.26 \cdot 1 - 2) + (0.2 + 0.26 \cdot 2 - 3) \right) = -1.54$$

güncel hali: $\theta_0 = 0.2 - (0.11) \cdot (-1.54) = 0.354$
 $\theta_1 = 0.26 - (0.11) \cdot (-2.03) = 0.463$