GRADIENT DESCENT FOR MUL. VARIABLES

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UNIVARIATE LINEAR REGRESSION HA PARAMETRI FISSATI

$h_\theta(x) = \theta_0 + \theta_1 x$ e basta

$$J(\theta_0, \theta_1) = \frac{1}{2m} \sum_{i=1}^{m} \left(h_\theta(x^{(i)}) - y^{(i)} \right)^2$$

$$\underset{\theta_0, \theta_1}{\text{minimize}} \left(J(\theta_0, \theta_1) \right)$$

MULTIVARIATE LINEAR REGRESSION

Nvolov

$$h_\theta(x^{(i)}) = \theta_0 + \theta_1 x^{(i)} + \theta_2 x_2^{(i)} \dots \theta_n x_n^{(i)}$$

$\theta_0, \theta_1, \theta_2 \dots \theta_n$

$$J(\theta) = J(\theta_0, \theta_1, \theta_2 \dots \theta_n) =$$

$$= \frac{1}{2m} \sum_{i=1}^{m} \left(h_\theta(x^{(i)}) - y^{(i)} \right)^2$$