Gradient Descent $\frac{\int \operatorname{Cadient} \operatorname{Descent} \left(\operatorname{Descent} \right)}{\int \operatorname{Descent} \left(\operatorname{Descent} \right) = \frac{1}{m} \underbrace{\left(\operatorname{ho}(x^{(i)}) - y^{(i)} \right)^{2}}{\left(\operatorname{ho}(x^{(i)}) - y^{(i)} \right)^{2}} = \underbrace{\frac{1}{m} \underbrace{\left(\operatorname{ho}(x^{(i)}) - y^{(i)} \right)^{2}}_{m}}_{1 \text{ descent}} \left(\operatorname{ho}(x^{(i)}) - y^{(i)} \right)^{2}}_{m \text{ descent}}$ $= \underbrace{\frac{1}{m} \underbrace{\left(\operatorname{ho}(x^{(i)}) - y^{(i)} \right)}_{m \text{ descent}}}_{1 \text{ descent}} \underbrace{\left(\operatorname{ho}(x^{(i)}) - y^{(i)} \right)^{2}}_{m \text{ descent}} \left(\operatorname{ho}(x^{(i)}) - y^{(i)} \right)$

 $= \frac{2}{m} \frac{g}{h} \left(h \phi(x^{(i)}) - y^{(i)} \right) \frac{\partial}{\partial \theta_0} \left(\theta_0 + \theta_1 x^{(i)} - y^{(i)} \right) = \frac{2}{m} \frac{g}{h} \left(h \phi(x^{(i)}) - y^{(i)} \right)$

 $\frac{1(0) = \frac{1}{2} \sum_{i=1}^{\infty} (h_{\theta}(x^{(i)}) - y^{(i)})^{2}}{\frac{1}{2} \sum_{i=1}^{\infty} (h_{\theta}(x^{(i)}) - y^{(i)})^{2}} = \frac{1}{2} \sum_{i=1}^{\infty} (h_{\theta}(x^{(i)} - y)) \frac{1}{2} \sum_{i=1}^{\infty} (h_{\theta}(x^{(i)} - y)) \frac{1}{2} \sum_{i=1}^{\infty} (h_{\theta}(x^{(i)} - y))^{2} \frac{1}{2} \sum_{i=1}^{\infty} (h_{\theta}(x^{(i)} - y)) \frac{1}{2} \sum_{i=1}^{\infty} (h_{\theta}(x^{(i)} - y)$

= (ho(x)-y) d (\$0;x;-y)=(ho(x)-y)x;

:. 0; := 0; +d(yi-h0(xi))x; /