Modify the user-defined function **LinearRegression** in example 4.1. The modified function should calculate the overall error E according to equation4.6:

$$E = \sum_{i=1}^{n} \left[y_i - (a_1 x_i + a_0) \right]^2$$

Function [a, Er] = LinReg(x,y)

The output argument **a** is a two-element vector with the values of the constants $\mathbf{a_1}$ and $\mathbf{a_0}$. The output argument Er is the overall error. Use the function to solve:

X	1	3	5	6	9	12	16
y	5	9	12	14	18	24	30