

Assgn. 11

Assuming a linear regression model, with the error terms autocorrelated according to

$$\varepsilon_i = \rho \cdot \varepsilon_{i-1} + \delta_i$$

where δ_i are independent, normally distributed with the mean of 0 and standard deviation of σ , compute the estimates of the regression coefficients, ρ and σ , based on the following data:

x :	1	2	3	4	5	6	7	8	9	10	11	12
y :	2.2	2.6	1.6	3.3	3.4	3.2	3.9	4.1	4.0	3.2	4.5	4.5
	13	14	15	16	17	18	19	20	21	22	23	
	5.3	4.0	5.6	4.4	5.5	6.7	6.0	6.3	7.1	6.2	6.5	