

UNIVARIATE STATISTICAL ANALYSIS

TUTORIAL SESSION 10

CORRELATION AND REGRESSION

Extra Question 1.

Consider the following data for the two variables, x and y .

x	1	2	3	4	5	6	7	8	9
y	100	98	91	86	80	77	75	76	70

- i). Calculate and interpret Correlation Coefficient, r
- ii). Calculate and interpret r^2
- iii). Form a simple regression model
- iv). Predict the y value when $x = 13$
- v). Plot the data and draw a trend line

Extra Question 2.

Consider the relationship between the secretaries' experience (in years) and their typing speed (word per minute).

x	1	1	3	6	10	2	8	2	5	7	3
y	60	65	70	73	75	68	79	67	75	76	68

- i). Calculate and interpret Correlation Coefficient, r
- ii). Calculate and interpret r^2
- iii). Form a simple regression model
- iv). Predict the y value when $x = 9$
- v). Plot the data and draw a trend line