1. A computer while calculating the correlation coefficient between two variables X and Y from 25 pairs of observations obtained the following results.

$\Sigma X = 125, \Sigma X^2 = 650, \Sigma Y = 100, \Sigma Y^2 = 460, \Sigma XY = 508, n = 25$

If was however, later discovered that at the time of checking that he had copied down two pairs as

X	Y
6	14
8	6

While the correct values were

X	Y
8	12
6	8

Obtain the correct correlation coefficient.

2. Obtain the rank correlation coefficient for the following data.

X	68	64	75	50	64	80	75	40	55	64
Y	62	58	68	45	81	60	68	48	50	70

3. Obtain the equations of two lines of regression for the following data. Also obtain the estimate of X for Y = 70

X	65	66	67	67	68	69	70	72
Y	67	68	65	68	72	72	69	71