

## Θεμα 2.

a.

Συντελεστής συσχέτισης spearman

Μηχανή M1.

Λίστα	$s_{1,j}$	$s_{2,j}$	$s_{1,j} - s_{2,j}$	$(s_{1,j} - s_{2,j})^2$
δ1	6	5	1	1
δ2	7	6	1	1
δ3	3	10	-7	49
δ4	4	3	1	1
δ5	4	3	1	1
δ6	2	2	0	0
δ7	8	7	1	1
δ8	1	8	-7	49
δ9	9	9	0	0
δ10	10	10	0	0

$$\text{Spearman rank coefficient} = S(R_1, R_2) = \frac{1 - 6 \times \sum_{j=1}^K (s_{1,j} - s_{2,j})^2}{K \times (K^2 - 1)}$$

$$S(R_1, R_2) = \frac{1 - 6 \times 103}{10 \times (100 - 1)} = 1 - \frac{618}{990} = 0,375$$

Kεντρικό



Kendall Tau.

$$A(R_1, R_2) = 11 \quad k = 10$$

$$\text{Apex} \quad \tau(R_1, R_2) = 1 - \frac{2 \times 11}{90} = 1 - \frac{22}{90} = 0,75$$