Ship Mode	Customer Name	Category	Sales (in K)	Quantity	Discount (%)	Profit (in K)
Second Class	Alejandro Grove	Office Supplies	56	2	0	10.0
Standard Class	Andrew Allen	Office Supplies	16	3	0.2	-5.4
Standard Class	Brendan Sweed	Technology	113	8	0.2	91.3
Standard Class	Brosina Hoffman	Furniture	49	7	0	14.2
First Class	Christopher Schild	Office Supplies	230	3	0.2	-49.0
Second Class	Claire Gute	Furniture	262	2	0	41.9
Standard Class	Darren Powers	Office Supplies	38	6	0	18.0
Second Class	Darrin Van Huff	Office Supplies	15	2	0	6.9
Standard Class	Duane Noonan	Technology	15	5	0	-4.2
Standard Class	Elpida Rittenbach	Office Supplies	78	6	0	22.6
Standard Class	Emily Burns	Furniture	145	3	0	80.3
Second Class	Eric Hoffmann	Office Supplies	12	2	0.2	4.2
Standard Class	Erin Smith	Office Supplies	96	2	0.2	-9.6
Second Class	Gary Mitchum	Office Supplies	158	7	0.2	13.9
First Class	Gene Hale	Technology	198	7	0.2	63.5

1   **Prepare the Summary Table.**

2   **Prepare the Box-Plot for Sales.**

3   **Normalize Profit to compare with Sales.**

4   **Prepare contigency table for Shipmode & Category.**

5   **Transform the data by One-Hot encoding on Shipmode.**

6   **Find the 99% Confidence Interval for Z-distribution on Sales.**

7   **Find the correlation strength between Quantity & Discount.**

8   **Perform Chi-square test to check for correlation between Shipmode & Category at 99% confidence level.**