**\*\* CODE IN THE SAS FILE \*\***

4) a)

AgeGroup: 1 (18-30), 2 (Over 30)

Late: 1 (Late Payment), 0 (On-Time Payment)

Count: Frequency

4) b)

Summary:

- The 18-30 age group has a higher late payment rate (17.67%)

- Compared to the over 30 group (11.33%).

- This suggests younger customers are more likely to make late payments.

- Next, we conduct a statistical test to see if this difference is significant.

4) c)

Summary:

- The Chi-Square test (p = 0.0276) shows a statistically significant difference in late payment rates between age groups.

- Younger customers (18-30) are \*\*more likely to make late payments.

- Next, we calculate the 95% confidence interval for this difference.

4) d)

Summary:

Key Findings from the Risk Estimates:

- Late Payment Rates:

a) 18-30 age group: 17.67% (0.1767)

b) Over 30 age group: 11.33% (0.1133)

c) Difference: 6.33% (0.0633)

- 95% Confidence Interval (CI) for the difference: (0.0072, 0.1195)

- Since the CI does not include 0, the difference is statistically significant.

Interpretation:

- Younger customers (18-30) are 6.33% more likely to make late payments than older customers.

- The bank should consider targeted interventions like:

a) Payment reminders

b) Financial education programs

c) Flexible repayment options for younger customers