

## Assignment Day 9

- 1) Number the rows in the Excel file Credit Risk Data to identify each record. The bank wants to sample from this database to conduct a more detailed audit. Find a simple random sample of 20 unique records.
- 2) A soft drink bottle filling machine is known to have a mean of 200ml and a standard deviation of 10 ml. The quality control manager took a random sample of the filled bottles and found the sample mean to be 215ml. She assumed the sample must not be representative. Do you agree with the conclusion made by the quality control manager? Justify your answer.
- 3) A sample of 25 individuals at a shopping mall found that the mean number of visits to a restaurant per week was 2.88 with a standard deviation of 1.59. Find a 99% confidence interval for the mean number of restaurant visits.
- 4) Using the data in the worksheet Consumer Transportation Survey, develop 95% confidence intervals for the following:
  - a. The proportion of individuals who are satisfied with their vehicle.
  - b. The proportion of individuals who have at least one child.