**Student: Seif Kungulio**

**Date: 02/16/2025**

**Subject: Project 5**

**Class: DSCI 502**

**Section: 01W**

**Instructor: Sean Yang**

**File Name: Project5\_Kungulio\_Seif.docx**

1. Read the dataset in loan.csv into R. Call the loaded data, loan. Make sure that you have the directory set to the correct location for the data.
2. Please plot the histogram and density of the loan\_amnt using basic graphics.
3. Please plot the histogram and density of the loan\_amnt and add the vertical line denoting the mean using ggplot2.
4. Please scatter plot of loan\_amnt (y-axis) against annual\_inc (x-axis) and add the trend line using basic graphics.
5. Please scatter plot of loan\_amnt (y-axis) against annual\_inc (x-axis) and add the trend line using ggplot2.
6. Please plot the barplot of term and grade on the same barplot using basic graphics
7. Please plot the barplot of term and grade on the same barplot using ggplot2
8. Please boxplot loan\_amnt (y-axis) against term (x-axis) and save the graph in a file, loanterm.jpg, using basic graphics.
9. Please boxplot loan\_amnt (y-axis) against term (x-axis) and save the graph in a file, loanterm.jpg, using ggplot2Are there any differences in loan amount with respect to term?