Computer Assignment 1:

This report is of a Python code that randomly generated numbers in four different sheets of an Excel file and visualizes the normal distribution plots using those randomly generated data. We have used three different functions for generating excel file, calculation of mean and standard deviation, and plotting the normal distribution.

create_file(file_name) is a function to create excel files which generate 4 sheets of 15 random numbers in the range of -1 to 1. The random numbers are saved to a new Excel file named "dataset.xlsx" with 4 sheets.

#calculate_stats(file_name) is a function to calculate mean and standard deviation for each sheet in a file. It returns the value of mean and standard deviation for each sheet.

#plot_distributions() is a function to plot the distribution of generated dataset. It is plotted with Probability density in Y-axis and respected values in X-axis. The generated plot is saved in current directory as png image file.

Result: