Summary Report

main.py:
This script defines four key functions for statistical analysis and plotting:
1. get_mean(x): Calculates the mean of a list or pandas Series by summing all elements and dividing by the count.
2. get_median(x): Sorts the input and returns the middle element (or average of two middle values for an even-length list).
3. get_std(x): Computes the standard deviation by finding the squared differences from the mean, calculating variance, and returning the square root of the variance.
4. get_plot(x): Plots the input data using matplotlib, setting titles and axis labels.

test_main.py:
This script tests the functions in main.py:
1. Loads data from an Excel file into a pandas DataFrame.
2. Extracts the 'Days Required' column to test.
3. Defines functions to check if the DataFrame is loaded and verifies the accuracy of the get_mean(), get_median(), and get_std() functions by comparing them to pandas' built-in methods.
4. Runs these tests and plots the data using get_plot().

Results:
1. All assertions pass.
2. The statistics description is below:

count	46.000000
mean	26.478261
std	8.309938
min	10.000000
25%	22.000000
50%	25.000000
75%	30.000000
max	60.000000

Name: Days Required, dtype: float64

3. The plot is below: