

## PDS ASSIGNMENT – 1

### QUESTION – 1 RESULTS

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- The code initially imports the necessary libraries and reads the raw frailty data from a CSV file.
- It then renames the columns and converts grip strength from kilograms to pounds.
- Statistical analysis is conducted using Welch's t-test to compare weight differences between frail (Y) and non-frail (N) groups.
- The results of the t-test, including the t-statistic, p-value, and means of each group, are written to a text file named "results.txt."
- A box plot is created to visualize the distribution of weights for both frail and non-frail groups, aiding in identifying potential weight differences between the two groups.
- A histogram is generated showing the distribution of weights from the provided sample data.

```
clean_frailty_data.csv  results.txt × ...
1 T-test Result: {t_test_result}
2 T-statistic: 2.1964625958466355
3 P-value: 0.07309706417382401
4 degree of freedom: 8
5 mean in group N 126.0
6 mean in group Y 140.75
7 |
```

