






```
from google.colab import files
data_to_load = files.upload()

Choose Files raw_handgrip_data.csv
• raw_handgrip_data.csv(text/csv) - 237 bytes, last modified: 2/12/2024 - 100% done
Saving raw_handgrip_data.csv to raw_handgrip_data.csv
```

```
import pandas as pd
from scipy import stats
# Assuming 'raw_handgrip_data.csv' is located in the current directory
df = pd.read_csv('raw_handgrip_data.csv')
df
```

	Height(Inches)	Weight(Pounds)	Age	Grip_Strength	Frailty	
0	65.8	112	30	30	N	
1	71.5	136	19	31	N	
2	69.4	153	45	29	N	
3	68.2	142	22	28	Y	
4	67.8	144	29	24	Y	
5	68.7	123	50	26	N	
6	69.8	141	51	22	Y	
7	70.1	136	23	20	Y	
8	67.9	112	17	19	N	
9	66.8	120	39	31	N	

```
df.head()
```

	Height(Inches)	Weight(Pounds)	Age	Grip_Strength	Frailty	
0	65.8	112	30	30	N	
1	71.5	136	19	31	N	
2	69.4	153	45	29	N	
3	68.2	142	22	28	Y	
4	67.8	144	29	24	Y	

```
Clean_handgrip_data = df.dropna()
# Print the modified dataframe
print(Clean_handgrip_data)
```

	Height(Inches)	Weight(Pounds)	Age	Grip_Strength	Frailty
0	65.8	112	30	30	N
1	71.5	136	19	31	N
2	69.4	153	45	29	N
3	68.2	142	22	28	Y
4	67.8	144	29	24	Y
5	68.7	123	50	26	N
6	69.8	141	51	22	Y
7	70.1	136	23	20	Y
8	67.9	112	17	19	N
9	66.8	120	39	31	N

```
Clean_handgrip_data.to_csv('Clean_handgrip_data.csv', index=False)
```

```
#import pandas as pd

# Load the dataset into a DataFrame
Clean_handgrip_data = pd.read_csv('/content/Clean_handgrip_data.csv')

# Separate the data into two groups based on Frailty and grip strength
group1 = Clean_handgrip_data[Clean_handgrip_data['Frailty'] == 'N']['Grip_Strength']
group2 = Clean_handgrip_data[Clean_handgrip_data['Frailty'] == 'Y']['Grip_Strength']
# Perform the two-sample t-test
t_statistic, p_value = stats.ttest_ind(group1, group2, equal_var=False)
# Print the results
print('T-statistic:', t_statistic)
print('P-value:', p_value)
```

T-statistic: 1.634999993460006
P-value: 0.141573041662856

