Weekly Summary (2nd Week)

What I did:

- Noted down all the key data measurements like extended length, available weights, etc.,
- Completed deflection measurements using the BOSCH laser measuring device at no weight condition and at a weight of 8.1 Kgs
- Angle measurements in degrees using phone sensors
- Compiled all the measured data into a CSV file
- Arduino basics and setup
- Observed the MPU offset values in different orientations
- Familiarized myself with MATLAB script, IDE interface and how to do the measurements
- Tried to calculate angles from using raw accelerometer readings and plot them

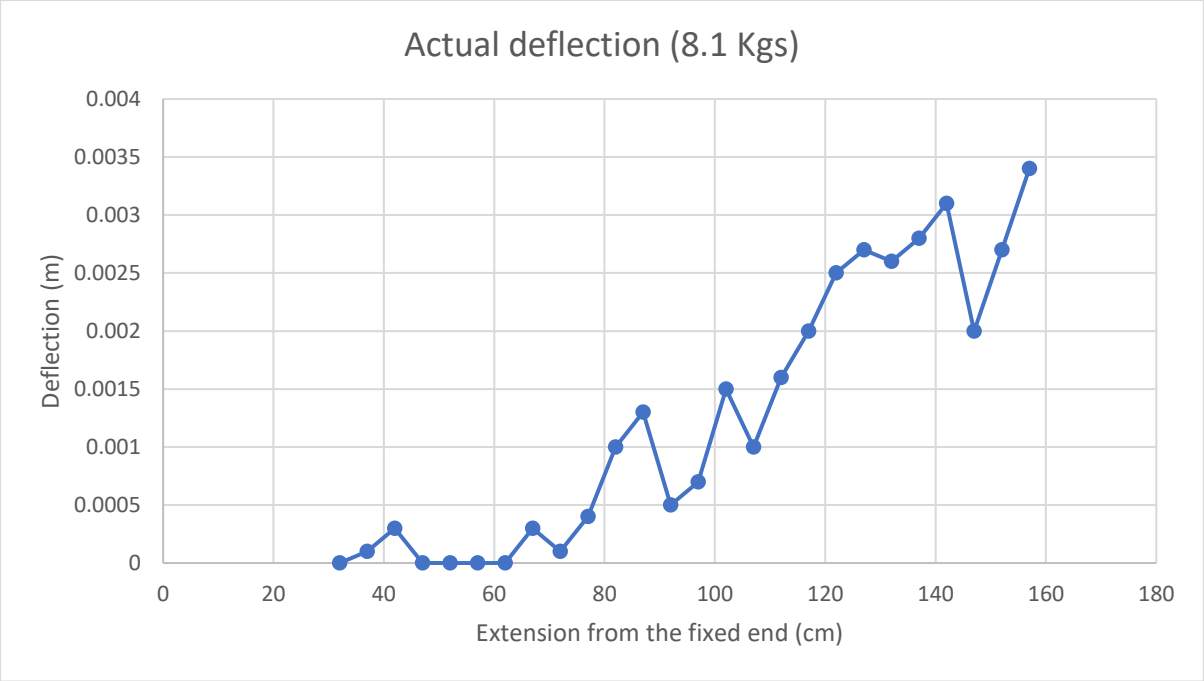
Problems I faced:

- Difficult to understand Arduino readings which are hard to make sense of.

Possibilities for future tasks:

- Completing the BOSCH device deflection measurements for 14.3 Kgs
- iPhone recordings of 8.1 Kgs and 14.3 Kgs with and without weights at an extension range of 112 cm to 157 cm
- Start measurements using Arduino and look for ways to calibrate it
- Look for the best possible position for Arduino placement to get the least possible error
- How can I calculate the angles from acceleration readings?
- Compile the previously done Arduino measurements in a log sheet

Plots and pictures:




```
>*......>......MPU Offsets:
-1830.00000,    1709.00000,    1672.00000,    -275.00000,    -222.00000,    25.00000
```