1. **regression equation** :grip_force_pred=w0+w1*weight+w2*weight^2
2. **variable**: age,gender,height,weight,bodyFat,diastolic,systolic

3.**regression equation:** grip_force_pred =w 0+w 1 · age+w 2 · gender+w 3 · height+w4 · weight+w5 · bodyFat+w6 · diastolic+w7 · systolic

4.**Problem encountered:** How to handle the NaN values in the data to improve accuracy.

5.**How to solve the difficulty:**Initially, I used the median of the column to fill in the NaN values, but the effect was limited. Later, I discarded the entire row containing NaN values, but the MAPE increased significantly.

6.**Reflection:** From this lab, I learned how to implement linear regression, as well as the importance and necessity of data preprocessing. I also understood that handling missing data and discarding extreme values can improve prediction accuracy.