**Objective:** The candidate needs to create a Python script that implements a simple linear regression algorithm without using machine learning libraries like scikit-learn or TensorFlow.

*Requirements*:

**Dataset**: *Dataset comprising three stages of bearing faults, with the inclusion of a healthy bearing in the first stage for comparative analysis. The dataset comprises data at different loads, ranging from 0k to 4k, for every stage of bearing faults. Additionally, the distribution of data within each stage is not uniform. The dataset consists of three stages, where the first stage represents a healthy bearing, the second stage includes data of bearings with certain degrees of damage, and the third stage comprises data of bearings that have undergone more severe damage.*

1. **Code**: Write Python code that performs the “Bearing Condition Monitoring”
2. **Read** the dataset
3. **Training:** Train the regression to predict the condition of the bearing
4. **Comments and Readability**: Use 65% for training, 25% for validation and 10% for testing
5. **Validation**: Ensure the code can be applied to new data and produces reasonable predictions