

## **Mechanical Engineering: (Machine Learning project)**

### **Problem statement No.39 – Predictive Maintenance of Industrial Machinery**

#### **The Challenge:**

Develop a predictive maintenance model for a fleet of industrial machines to anticipate failures before they occur. This project will involve analyzing sensor data from machinery to identify patterns that precede a failure. The goal is to create a classification model that can predict the type of failure (e.g., tool wear, heat dissipation, power failure) based on real-time operational data. This will enable proactive maintenance, reducing downtime and operational costs.

**Kaggle dataset link – <https://www.kaggle.com/datasets/shivamb/machine-predictive-maintenance-classification>**

**Technology –** Use of IBM cloud lite services is mandatory.