# Task 1 Summary Report

## Approach for Tagging Each Field:

### Root Cause:

- Mapped text in the 'Cause' column to predefined root causes in the Taxonomy sheet.

- Used keyword matching and logical reasoning for missing values.

### 2. Symptom Condition:

- Extracted relevant conditions from the 'Complaint' column.

- Mapped phrases to the closest predefined categories.

### 3. Symptom Component:

- Identified components mentioned in complaints.

- Mapped them to the nearest match in the Taxonomy.

### 4. Fix Condition:

- Extracted correction actions from the 'Correction' column.

- Assigned the most relevant predefined fix condition.

### 5. Fix Component:

- Mapped fixed components based on text in the 'Correction' column.

## Insights from the Dataset:

- Common Issues: Many complaints are related to missing, loose, or uninstalled components.

- Frequent Root Causes: 'Not Tightened' and 'Not Installed' are the most common failure reasons.

- Fix Trends: Most fixes involve retightening, reinstalling, or replacing parts.

- Potential Improvement Areas:

- Manufacturing processes could focus on quality control to reduce recurring issues.

- Automated alerts for frequently occurring failures can improve maintenance efficiency.