REPORT

Team name – codefiends

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Explanation on preprocessing.

1. **Loading Data**
   * The dataset (steps\_tracker\_dataset.csv) is loaded into a Pandas DataFrame.
2. **Handling Missing Values**
   * The code checks for missing values using .isna().sum().
   * Any missing values are removed using .dropna(), ensuring the dataset is clean.
3. **Date Conversion**
   * The date column is converted to a datetime format using pd.to\_datetime().
   * This step ensures proper time-based analysis and sorting.
4. **Encoding Categorical Data**
   * The mood column, which contains categorical data, is transformed into numerical values using LabelEncoder().
   * This is necessary for machine learning models that require numerical inputs.
5. **Feature Normalization**
   * Numerical columns (steps, distance\_km, calories\_burned, etc.) are scaled using MinMaxScaler().
   * Min-Max Scaling ensures that all numerical values are within the range of 0 to 1, improving model performance.

Screenshots:

A screenshot of a computer

AI-generated content may be incorrect.

Plots :

A screenshot of a computer

AI-generated content may be incorrect.