Task 6

Machine Learning

Upload .py or Ipynb extension file on GitHub public repo "100DaysofBytewise" and share the link in the submission form by 2 July 2024.

- **Exercise:** Load a simple dataset (e.g., the Iris dataset from Scikit-Learn) and print the first 5 rows.
- **Exercise**: Implement a function that takes a dataset and returns the number of features and samples.
- **Exercise**: Split a dataset into training and testing sets with an 80/20 split.
- **Exercise**: Explore the basic statistics of a dataset, such as mean, median, and standard deviation for each feature.
- **Exercise**: Visualize the distribution of one of the features in the dataset using a histogram.
- **Exercise**: Write a Python script to create a list of 10 numbers and compute their mean.
- **Exercise**: Create a function that takes a list of numbers and returns a dictionary with the count, mean, median, and standard deviation.
- **Exercise**: Generate a 5x5 matrix of random numbers and print it.
- **Exercise**: Load a CSV file into a Pandas DataFrame and print summary statistics for each column.
- **Exercise**: Implement a simple linear regression model using Scikit-Learn and print the model coefficients