5. Hyperparameter Tuning with GridSearchCV or RandomizedSearchCV:

- **Description:** Perform hyperparameter tuning to optimize the performance of a machine learning model.
- Why: Hyperparameter tuning is essential to get the best possible performance from a machine learning model.

• Tasks:

- o Train a machine learning model (e.g., Random Forest or SVM) on a dataset.
- o Use GridSearchCV or RandomizedSearchCV to find the optimal hyperparameters.
- o Compare the model's performance with and without tuning.
- o Submit the code with the analysis of the tuned hyperparameters, and upload the project on GitHub, sharing the link.