Task1 C2

- **Data Preprocessing**:
  - Load the dataset.
  - Handle missing values, if any.
  - Perform feature scaling and normalization.
  - Split the data into training and testing sets.
- **Exploratory Data Analysis (EDA)**:
  - Visualize the distribution of features.
  - Analyze feature correlations.
  - Identify and visualize outliers.
- **Model Building**:
  - Select appropriate machine learning algorithms (e.g., Decision Trees, SVM, Random Forest, etc.).
  - Train the model on the training set.
- **Model Evaluation**:
  - Evaluate the model using appropriate metrics (e.g., accuracy, precision, recall for classification; RMSE, MAE for regression).
  - Perform cross-validation.
- **Hyperparameter Tuning**:
  - Use GridSearchCV or RandomizedSearchCV to optimize hyperparameters.
- **Model Interpretation**:
  - Analyze feature importance.
  - Visualize decision boundaries (for classification).
- **Final Report**:
  - Summarize findings.
  - Discuss model performance and potential improvements.

Datasets:
https://www.kaggle.com/datasets/mokar2001/house-price-tehran-iran/data

Regression: House price
Classification: having Parking or not.