Preprocessing Workflow:

Abstract Workflow Node (Operation)	Input(s)	Output(s)	Implementation
Count null data	dataframe	Null counts	Count null data
Delete column with zero data	Dataframe, threshold value	Dataframe	Deletes columns with zero data with threshold
Separate categorial numerical	Dataframe	Categorial columns, numerical columns	Separate categorical and numerical values
Drop column with zero threshold	Dataframe, threshold value	Dataframe	Perform drop columns with a threshold value
Apply 1 plus log transformation	Dataframe, columns to transform	Dataframe	Perform np.log1p function from numpy on the dataframe

Analysis Workflow:

Abstract Workflow Node (Operation)	Input(s)	Output(s)	Implementation
Plot boxplot	Dataframe, x-axis column, y-axis column, output directory	Boxplot_of_{y_column}_by_{x_column}.png	Implementation of EDA among the columns
Plot heatmaps	Dataframe, output directory	Correlation_Matrix_Heatmap.png	How do the different columns correlate with the house's sale price?

Evaluation **Workflow:**

Abstract Workflow Node (Operation)	Input(s)	Output(s)	Implementation
Model evaluation	Model name, model to be evaluated, test features, true value, output file	Dictionary containing evaluation metrics	Evaluate MSE and R2-score of the models
Hyperparameter tuning	Models, parameter grids, X_train, y_train	Best model, best parameter	Perform hyperparameter tuning using GridSearchCV for multiple models