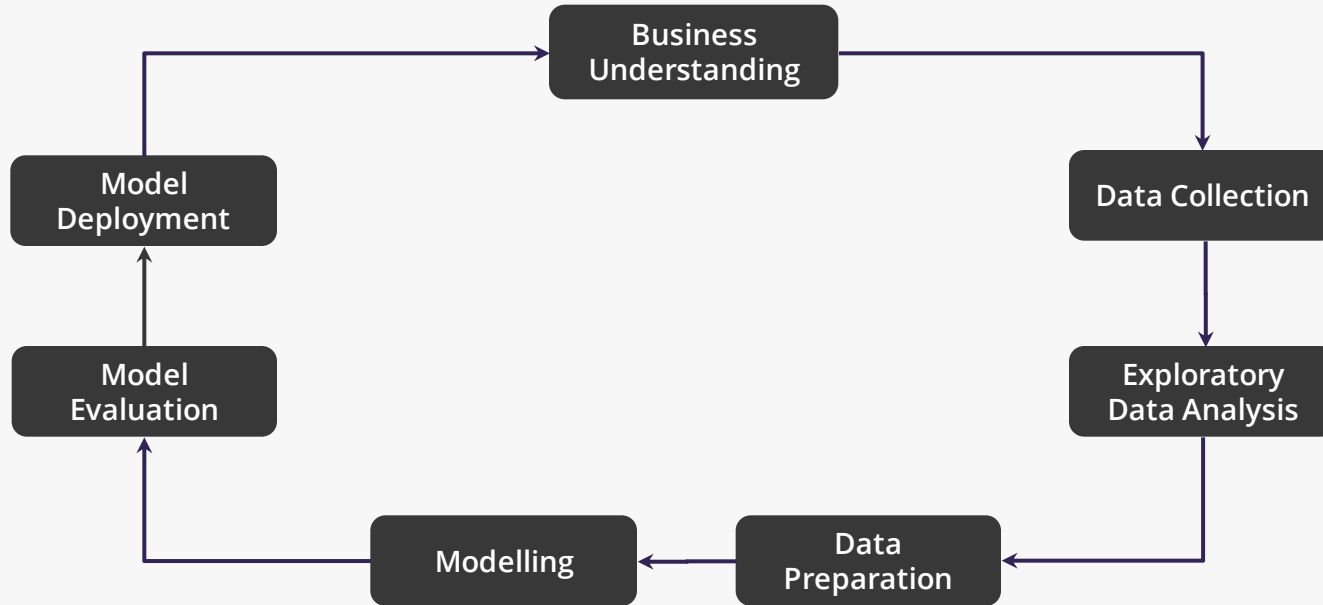
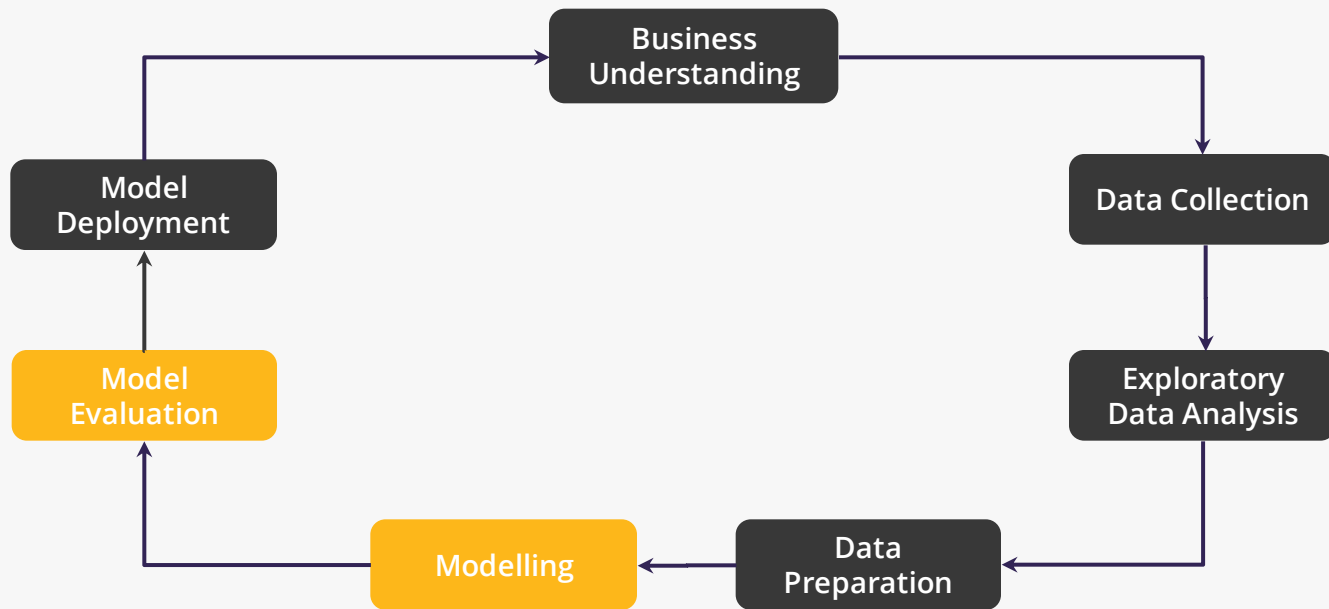


# Machine Learning Workflow



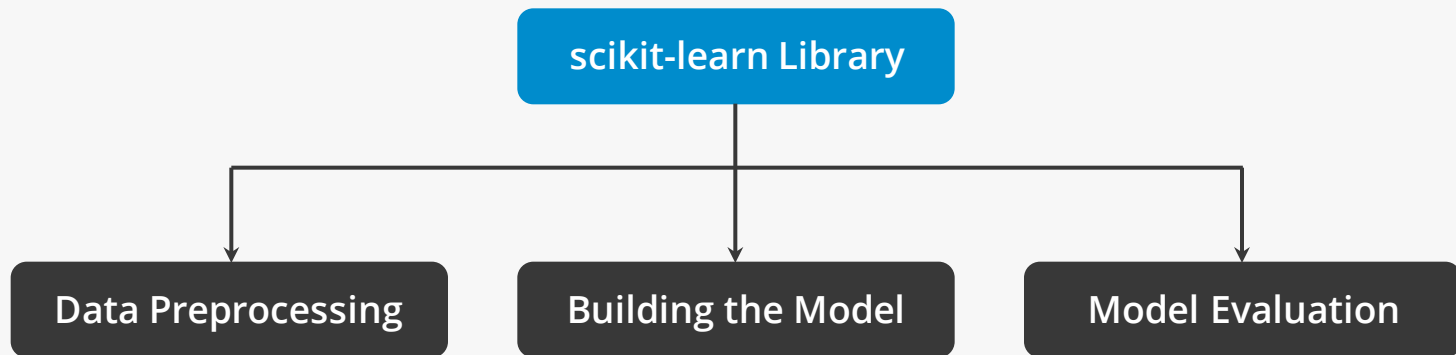
# Machine Learning Workflow





# scikit-learn Library

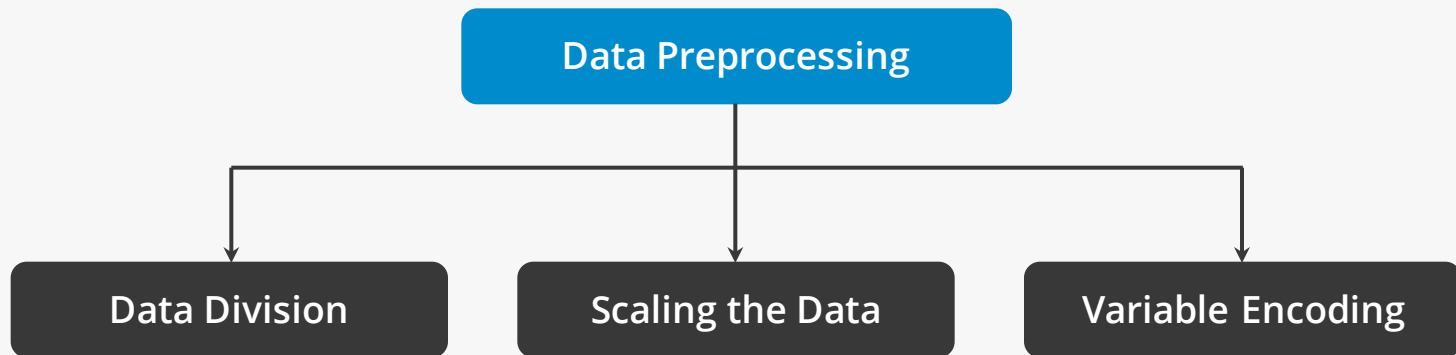
# scikit-learn Library





# Data Preprocessing in scikit-learn Library

# Data Preprocessing in scikit-learn



# Data Division using scikit-learn

- `from sklearn.model_selection import train_test_split`
- `from sklearn.model_selection import KFold`



# Scaling the Data using scikit-learn

- `from sklearn.preprocessing import robust_scale`
- `from sklearn.preprocessing import StandardScaler`





# Variable Encoding using scikit-learn

- `from pandas import get_dummies`
- `from sklearn.preprocessing import OneHotEncoder`
- `from sklearn.preprocessing import LabelEncoder`





# Building a Model Using scikit-learn Library

# Building a Model using scikit-learn

- #Import the necessary class  
`from sklearn.neighbors import KNeighborsClassifier`
- #Setting the value for k or neighbors at 5  
`knn_model = KNeighborsClassifier(5)`



# Building a Model using scikit-learn

- #Training the model with train data

```
knn_model.fit(x_train_scaled,y_scaled)
```

- #Making predictions on the test data

```
y_pred = knn_model.predict(x_test_scaled)
```





# Model Evaluation Using scikit-learn Library

# Model Evaluation using scikit-learn

- `from sklearn.metrics import accuracy_score`

