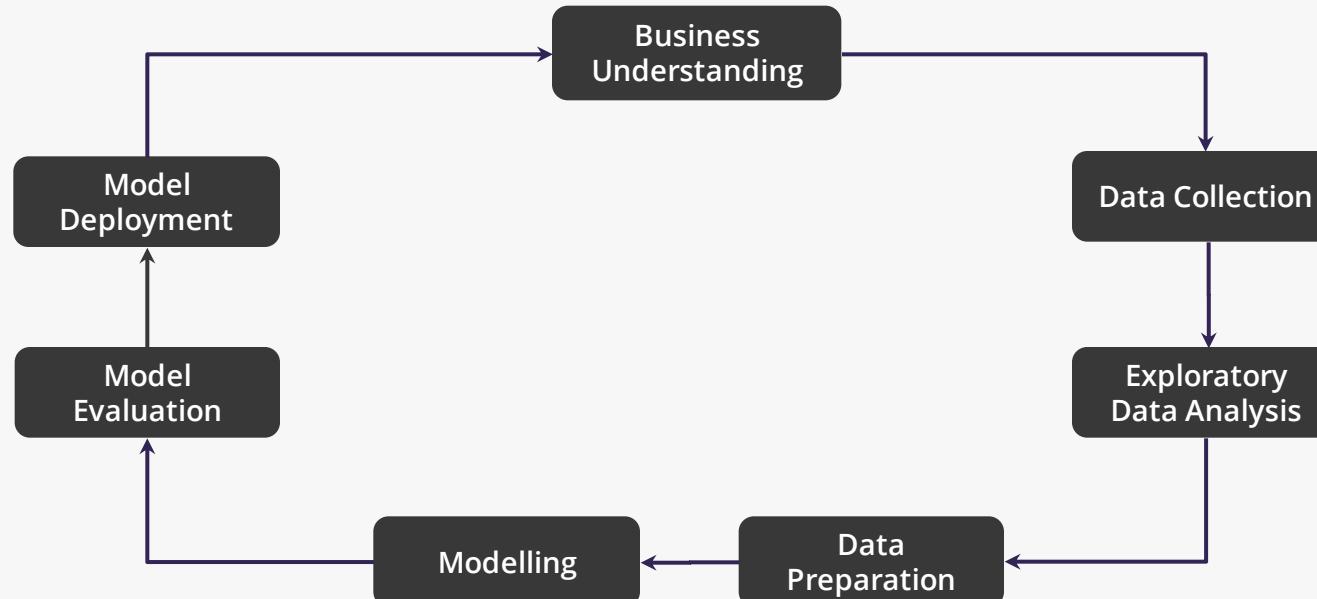
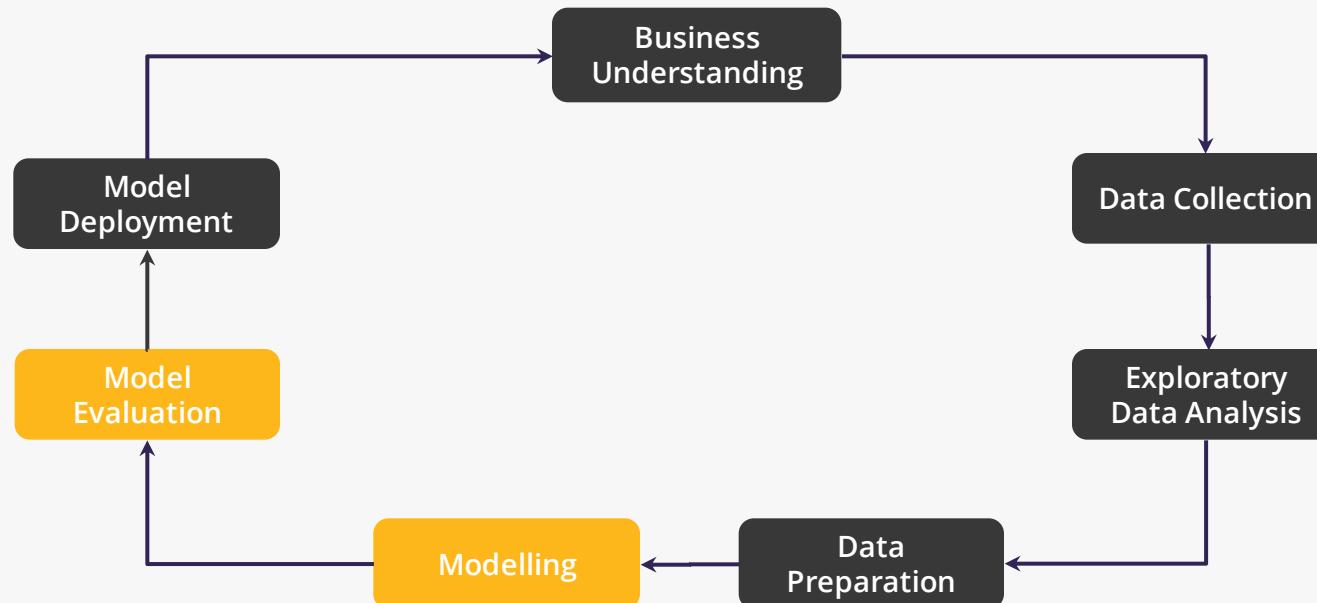


Machine Learning Workflow



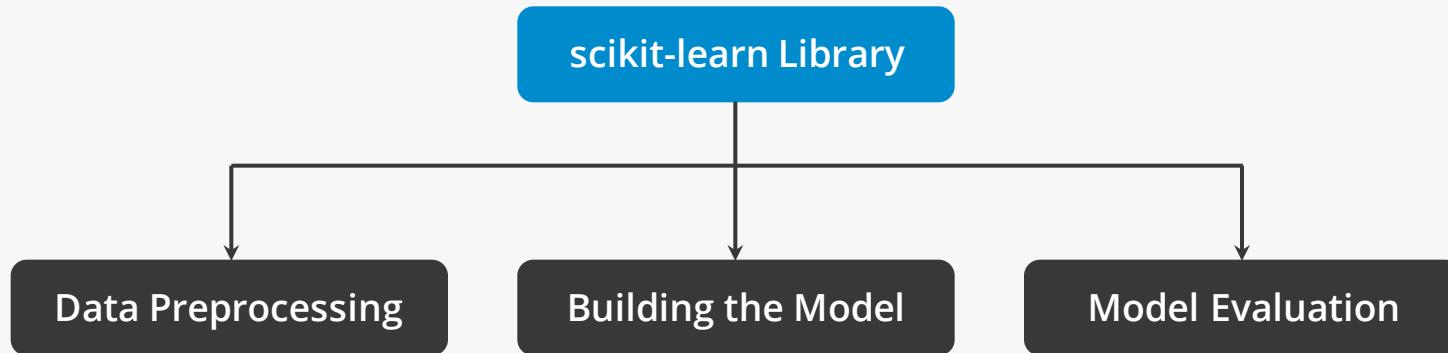
Machine Learning Workflow





scikit-learn Library

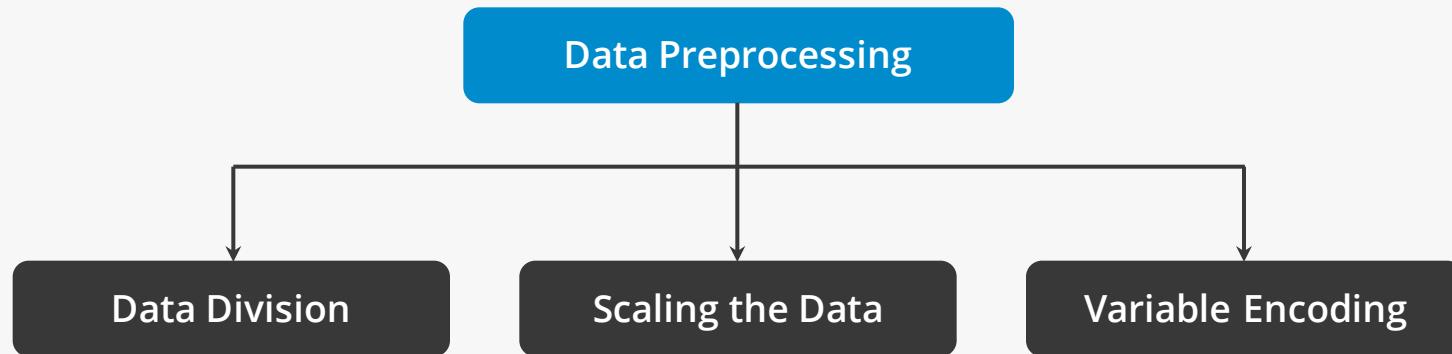
scikit-learn Library





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`

