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**COURSE:** MACHINE LEARNING

**ASSIGNMENT:** PWH1\_LAB

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## BestClassifier

```
BestClassifier(X,y,to_scale =None,t_encode=None)
```

BestClassifier:

Find the best combination of scaler, encoder, fitting algorithm  
print best score and best combination

### Parameters

X: DataFrame of predictors

y: DataFrame of labels

#### to\_scale:

option whether the data is to be scaled = True if t needs scaling ., None  
if there is no need of encoding

#### to\_encode:

an option whether the data is to be encoded if t needs encoding, None if  
there is no need of encoding :

scalers: list of scalers

### Attributes

#### Scalers List :

[StandardScaler(), MinMaxScaler(), MaxAbsScaler(), RobustScaler()]  
if you want to scale other ways, then put the scaler in list

#### Encoders list

[OrdinalEncoder(), OneHotEncoder(), SVC(),]  
if you want to use only one, put an encoder in list

#### Models list

[DecisionTreeClassifier(criterion='entropy'), DecisionTreeClassifier(criterion='gini') , LogisticRegression(), SVC()]  
if you want to fit other ways, then put the model in the list