**#5.1 - Encoding Nominal Categorical Features**

**#create feature**

feature = np.array([["Texas"],

["California"],

["Texas"],

["Delaware"],

["Texas"]])

print(feature)

print("feature created")

**#create one-hot encoder**

one\_hot = LabelBinarizer()

print(one\_hot.fit\_transform(feature))

print("States are encoded")

**#view feature classes**

one\_hot.classes\_

print(np.array(['California', 'Delaware', 'Texas', 'Delaware', 'Texas'], dtype='<U10'))

print("feature classes printed")

**#create dummy variables from feature**

print(pd.get\_dummies(feature[:,0]))

print("dummy variables")

**#multiclass features**

multiclass\_feature =[("Texas", "Florida"),

("California", "Alabama"),

("Texas", "Florida"),

("Delaware", "Florida"),

("Texas", "Alabama")]

print (multiclass\_feature)

print("multiclass\_feature")

one\_hot\_multiclass = MultiLabelBinarizer()

print(one\_hot\_multiclass.fit\_transform(multiclass\_feature))

print(one\_hot\_multiclass)

print("one\_hot\_multiclass")

print(one\_hot\_multiclass.classes\_)

print("multiclass classes")

**#5.2 Encoding Ordinal Categorical Features**

**#create features**

dataframe = pd.DataFrame({"Score":["Low", "Low", "Medium", "Medium", "High"]})

print(dataframe)

print("features")

**#create mapper**

scale\_mapper = {"Low":1,

"Medium":2,

"High":3}

**#replace feature values with scale**

print(dataframe["Score"].replace(scale\_mapper))

print("scaled")