# Program – 13

# AIM: PROGRAMS ON FEEDFORWARD NETWORK TO CLASSIFY ANY STANDARD DATASET AVAILABLE IN THE PUBLIC DOMAIN

**PROGRAM**

# from tensorflow import keras

# print('Tensorflow/keras : %s'%keras.version)

# from keras.models import Sequential

# from keras import Input

# from keras.layers import Dense

# import pandas as pd

# print('pandas : %s' %pd.version)

# import numpy as np

# print('numpy : %s' %np.version)

# import sklearn

# print('sklearn : %s' %sklearn.version)

# from sklearn.model\_selection import train\_test\_split

# from sklearn.metrics import classification\_report

# import plotly

# import plotly.express as px

# import plotly.graph\_objects as go

# print('plotly : %s' %plotly.version)

# pd.options.display.max\_columns=50

# df=pd.read\_csv('weatherAUS.csv', encoding='utf-8')

# df=df[pd.isnull(df['RainTomorrow'])==False]

# #df=df.fillna(df.mean())

# df['RainTodayFlag']=df['RainToday'].apply(lambda x: 1 if x=='Yes' else 0)

# df['RainTomorrowFlag']=df['RainTomorrow'].apply(lambda x: 1 if x=='Yes' else 0)

# print(df)

# X = df[['Humidity3pm']]

# Y = df['RainTomorrowFlag'].values

# X\_train, X\_test, Y\_train, Y\_test = train\_test\_split(X,Y, test\_size=0.2, random\_state=0)

# model = Sequential(name="Model-with-One-Input")

# model.add(Input(shape=(1,), name='Input-Layer'))

# model.add(Dense(2, activation='softplus', name='Hidden-Layer'))

# model.add(Dense(1, activation='sigmoid', name='Output-Layer'))

**OUTPUT**

# 

# 

# 