**CODE for creating dashboard using Python**

# Import required packages

import pandas as pd

import plotly.express as px

import dash

from dash import dcc

from dash import html

# Read the airline data into pandas dataframe

airline\_data =  pd.read\_csv('https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBMDeveloperSkillsNetwork-DV0101EN-SkillsNetwork/Data%20Files/airline\_data.csv',

                            encoding = "ISO-8859-1",

                            dtype={'Div1Airport': str, 'Div1TailNum': str,

                                   'Div2Airport': str, 'Div2TailNum': str})

# Randomly sample 500 data points. Setting the random state to be 42 so that we get same result.

data = airline\_data.sample(n=500, random\_state=42)

# Pie Chart Creation

fig = px.pie(data, values='Flights', names='DistanceGroup', title='Distance group proportion by flights')

# Create a dash application

app = dash.Dash(\_\_name\_\_)

# Get the layout of the application and adjust it.

# Create an outer division using html.Div and add title to the dashboard using html.H1 component

# Add description about the graph using HTML P (paragraph) component

# Finally, add graph component.

app.layout = html.Div(children=[html.H1('Airline Dashboard', style={'textAlign': 'center', 'color': '#503D36', 'font-size': 40}),

                                html.P('Proportion of distance group (250 mile distance interval group) by flights.', style={'textAlign':'center', 'color': '#F57241'}),

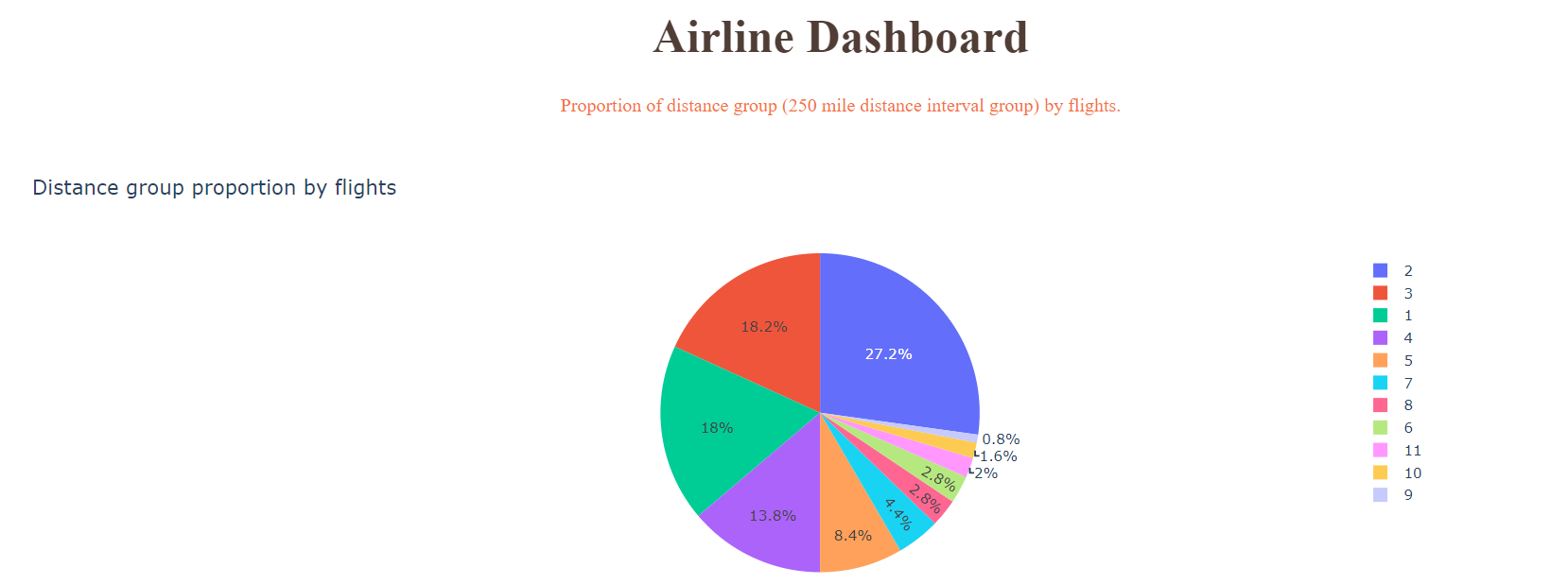
                                dcc.Graph(figure=fig),

                    ])

# Run the application

if \_\_name\_\_ == '\_\_main\_\_':

    app.run\_server()



**Installation and execution of python code in terminal**

python3.8 -m pip install packaging

python3.8 -m pip install pandas dash

pip3 install httpx==0.20 dash plotly

* Run the python file using the following command in the terminal

python3.8 dash\_basics.py