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**DAV EXPERIMENT NO : 4**

import pandas as pd

import plotly.express as px

# 1. Load the COVID-19 confirmed cases data from the given URL

url = 'https://raw.githubusercontent.com/CSSEGISandData/COVID-19/master/csse\_covid\_19\_data/csse\_covid\_19\_time\_series/time\_series\_covid19\_confirmed\_global.csv'

df = pd.read\_csv(url) # Correct function to load CSV

# 2. Filter the data for the specific country (India)

country = 'India'

df\_country = df[df['Country/Region'] == country]

# 3. Transpose the dataframe and reset the index

df\_country = df\_country.T[4:]

# 4. Reset the index and rename columns for easier interpretation

df\_country = df\_country.reset\_index()

df\_country.columns = ['Date', 'Confirmed Cases']

# 5. Convert the 'Date' column to datetime format

df\_country['Date'] = pd.to\_datetime(df\_country['Date'])

# 6. Plot the time series of confirmed COVID-19 cases in India

fig = px.line(df\_country, x='Date', y='Confirmed Cases', title=f'COVID-19 Confirmed Cases in {country}',

labels={'Confirmed Cases': 'Confirmed Cases'},

line\_shape='linear', render\_mode='svg')

# 7. Customize the plot layout

fig.update\_layout(

xaxis\_title='Date',

yaxis\_title='Confirmed Cases',

template='plotly\_dark', # Use the 'plotly\_dark' template for a dark-themed chart

xaxis\_rangeslider\_visible=True # Show range slider for zooming in and out on the date axis

)

# 8. Show the plot

fig.show()

