

```

In [1]: import csv
from datetime import datetime, timedelta

# Define the file name
filename = "covid_impact_analysis.csv"

# Create sample data
start_date = datetime(2025, 5, 1)
data = []

for i in range(100):
    date = (start_date + timedelta(days=i)).strftime("%Y-%m-%d")
    data.append([
        date, "Jorhat", 10000 + i * 150, 150, 500 + i * 5, 5,
        9500 + i * 100, 200 - i, 50000 + i * 500, f"{3 + i*0.05}%",
        8000 + i * 200, f"{80 + i*0.5}%", f"GDP -{5 - i*0.05}%",
        f"{30 - i*0.2}%", f"{50 + i*0.5}%",
        "No restrictions" if i > 20 else "Masks recommended"
    ])

# Define CSV headers
headers = [
    "Date", "Location", "Total Cases", "New Cases", "Total Deaths", "New Deaths",
    "Recovered Cases", "Hospitalizations", "Testing Conducted", "Positivity Rate",
    "Vaccinations Administered", "Population Vaccinated", "Economic Impact",
    "Mobility Reduction", "ICU Availability", "Government Policies"
]

# Write data to CSV file
with open(filename, mode="w", newline="", encoding="utf-8") as file:
    writer = csv.writer(file)
    writer.writerow(headers)
    writer.writerows(data)

print(f"CSV file '{filename}' has been successfully created!")
import pandas as pd

# Read the CSV file
df = pd.read_csv("covid_impact_analysis.csv")

# Display the table
print(df)

```

CSV file 'covid_impact_analysis.csv' has been successfully created!

	Date	Location	Total Cases	New Cases	Total Deaths	New Deaths	\
0	2025-05-01	Jorhat	10000	150	500	5	
1	2025-05-02	Jorhat	10150	150	505	5	
2	2025-05-03	Jorhat	10300	150	510	5	
3	2025-05-04	Jorhat	10450	150	515	5	
4	2025-05-05	Jorhat	10600	150	520	5	
..	
95	2025-08-04	Jorhat	24250	150	975	5	
96	2025-08-05	Jorhat	24400	150	980	5	
97	2025-08-06	Jorhat	24550	150	985	5	
98	2025-08-07	Jorhat	24700	150	990	5	
99	2025-08-08	Jorhat	24850	150	995	5	

	Recovered Cases	Hospitalizations	Testing Conducted	Positivity Rate	\
0	9500	200	50000	3.0%	
1	9600	199	50500	3.05%	
2	9700	198	51000	3.1%	
3	9800	197	51500	3.15%	
4	9900	196	52000	3.2%	
..	
95	19000	105	97500	7.75%	
96	19100	104	98000	7.8000000000000001%	
97	19200	103	98500	7.8500000000000005%	
98	19300	102	99000	7.9%	
99	19400	101	99500	7.95%	

	Vaccinations Administered	Population Vaccinated	\
0	8000	80.0%	
1	8200	80.5%	
2	8400	81.0%	
3	8600	81.5%	
4	8800	82.0%	
..	
95	27000	127.5%	
96	27200	128.0%	
97	27400	128.5%	
98	27600	129.0%	
99	27800	129.5%	

	Economic Impact	Mobility Reduction	ICU Availability	\
0	GDP -5.0%	30.0%	50.0%	
1	GDP -4.95%	29.8%	50.5%	
2	GDP -4.9%	29.6%	51.0%	
3	GDP -4.85%	29.4%	51.5%	
4	GDP -4.8%	29.2%	52.0%	
..	
95	GDP -0.25%	11.0%	97.5%	
96	GDP -0.199999999999993%	10.79999999999997%	98.0%	
97	GDP -0.1499999999999947%	10.59999999999998%	98.5%	
98	GDP -0.0999999999999964%	10.39999999999999%	99.0%	
99	GDP -0.0499999999999982%	10.2%	99.5%	

	Government Policies
0	Masks recommended
1	Masks recommended
2	Masks recommended
3	Masks recommended
4	Masks recommended
..	...
95	No restrictions
96	No restrictions
97	No restrictions
98	No restrictions
99	No restrictions

[100 rows x 16 columns]

In []:

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