LEVEL 3

Task 1

```
import requests
from bs4 import BeautifulSoup

url = 'https://www.bbc.com/news'

response = requests.get(url)

soup = BeautifulSoup(response.content, 'html.parser')

article_titles = soup.find_all('h3', class_='gs-c-promo-heading__title')

for title in article_titles:
    print(title.get_text())
```

OutPut-

```
PS C:\Users\cw\Desktop\Python Internship> python -u "c:\Users\cw\Desktop\Python Internship\Task 3\Level_3_T1.py"
Maui bracing for 'significant' death toll rise
Maui bracing for 'significant' death toll rise
This battery-swapping bike aims to unchoke cities
Inexplicable mass stabbings unsettle South Korea
The meat-and-rice dessert loved by Indian royals
Australia gripped by penalty drama on historic night
Hawaii fires: 'Tourists swim in the waters we died in'
Thousands of soldiers move Ecuador gang leader
Stunning photos as Perseid meteors light up skies
Watch: Police drone finds man on the run hiding in drain
Metal boats and 'rescue gaps' fuel Mediterranean migrant deaths
Girl, 3, dies on controversial Texas migrant bus
Metal boats and 'rescue gaps' fuel Mediterranean migrant deaths
Girl, 3, dies on controversial Texas migrant bus
Iran's politicians to debate hijab laws in secret
US returns haul of stolen artefacts to Italy
Six dead after migrant boat sinks in Channel
Watch: Drone footage shows mass devastation in Maui
Maui student: 'I wake up gagging and crying'
How Pinky's famous truck saved lives in Hawaii
Lahaina residents return to devastation
Why weren't Maui residents warned sooner?
```

LEVEL 3

Task 2

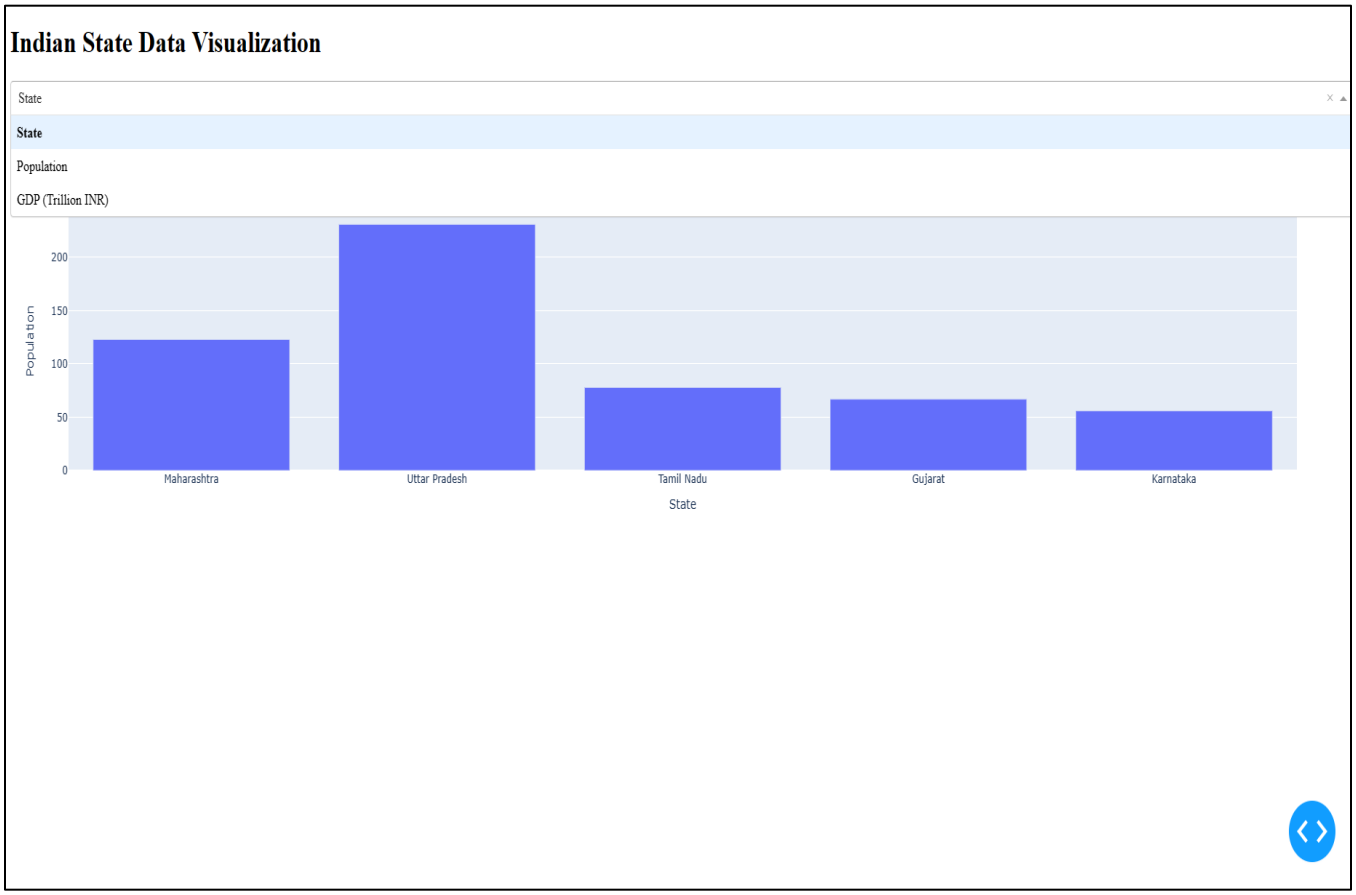
```
import plotly.express as px
import pandas as pd
import dash
from dash import dcc, html
from dash.dependencies import Input, Output

# Sample dataset for Indian states
data = {
    'State': ['Maharashtra', 'Uttar Pradesh', 'Tamil Nadu', 'Gujarat',
'Karnataka'],
    'Population': [123, 231, 78, 67, 56],
    'GDP (Trillion INR)': [2.56, 1.98, 1.76, 1.45, 1.30]
}

df = pd.DataFrame(data)

app = dash.Dash(__name__)
app.layout = html.Div([
    html.H1("Indian State Data Visualization"),

    dcc.Dropdown(
        id='column-dropdown',
        options=[{'label': col, 'value': col} for col in df.columns],
        value=df.columns[1],  # Default selection
        multi=False
    ),

    dcc.Graph(id='visualization')
])

@app.callback(
    Output('visualization', 'figure'),
    [Input('column-dropdown', 'value')]
)
def update_visualization(selected_column):
    figure = None

    if selected_column:
        if selected_column == 'State':
            figure = px.bar(df, x='State', y='Population', title='Population by
State')
        elif selected_column == 'Population':
```

LEVEL 3

```
            figure = px.scatter(df, x='State', y='Population', title='Population
by State')
        elif selected_column == 'GDP (Trillion INR)':
            figure = px.bar(df, x='State', y='GDP (Trillion INR)', title='GDP by
State')

    return figure

if __name__ == '__main__':
    app.run_server(debug=True)
```

OutPut-

```
Dash is running on http://127.0.0.1:8050/

 * Serving Flask app 'Level_3_T2'
 * Debug mode: on
```



LEVEL 3

Task 3

```python
import pandas as pd

def process_customer_records(input_file, output_file):

  customer_records = pd.read_csv(input_file)

  customer_records = customer_records.drop_duplicates()
  customer_records = customer_records.fillna("")

  customer_records["Name"] = customer_records["Name"].str.title()
  customer_records["Email"] = customer_records["Email"].str.lower()

  customer_records.to_csv(output_file, index=False)

if __name__ == "__main__":
  input_file = "customer_records.csv"
  output_file = "processed_customer_records.csv"

  process_customer_records(input_file, output_file)
```

OutPut-

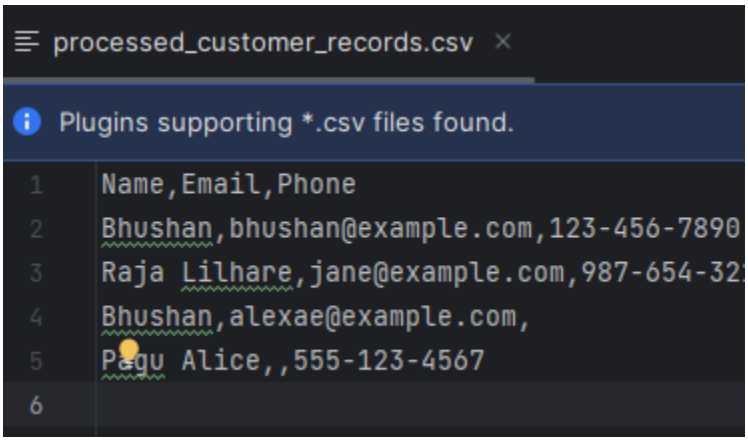
```
Process finished with exit code 0
```

Level_3_T3.py | customer_records.csv | processed_customer_records.csv

Plugins supporting *.csv files found.

```
1  Name,Email,Phone
2  Bhushan,bhushan@example.com,123-456-7890
3  Raja Lilhare,jane@example.com,987-654-3210
4  Bhushan,alexae@example.com,
5  Pagu Alice,,555-123-4567
6  Bhushan,bhushan@example.com,123-456-7890
7  Bhushan,bhushan@example.com,123-456-7890
8  Raja Lilhare,jane@example.com,987-654-3210
9  Bhushan,alexae@example.com,
10 Pagu Alice,,555-123-4567
11 Bhushan,bhushan@example.com,123-456-7890
```

LEVEL 3


processed_customer_records.csv
Plugins supporting *.csv files found.
Name,Email,Phone
Bhushan,bhushan@example.com,123-456-7890
Raja Lilhare,jane@example.com,987-654-32
Bhushan,alexae@example.com,
Pagu Alice,,555-123-4567