1. Create a form using Tkinter on your Domain details. (Domain name, Student name and other details, with text boxes, radio buttons, menu and the required widgets you can use)

```
In [ ]: import tkinter as tk
                  root = tk.Tk()
                  root.title("E-commerce Domain Details Form")
                  root.geometry("400x300")
                  root.configure(bg="#FFDDDD")
                  domain_label = tk.Label(root, text="Domain: E-commerce Clothing", bg="#FFDDDD")
                  domain_label.grid(row=0, column=0, columnspan=2, padx=10, pady=10, sticky="w")
                  product_category_label = tk.Label(root, text="Product Category:")
                  product_category_label.grid(row=1, column=0, padx=10, pady=5, sticky="w")
                  product_category_var = tk.StringVar()
                  shirt_radio = tk.Radiobutton(root, text="Shirt", variable=product_category_var,
                  shirt_radio.grid(row=1, column=1, padx=10, pady=5, sticky="w")
                  pant_radio = tk.Radiobutton(root, text="Pants", variable=product_category_var, variable=
                  pant_radio.grid(row=2, column=1, padx=10, pady=5, sticky="w")
                  dress_radio = tk.Radiobutton(root, text="Dress", variable=product_category_var,
                  dress_radio.grid(row=3, column=1, padx=10, pady=5, sticky="w")
                  payment options label = tk.Label(root, text="Payment Options:")
                  payment_options_label.grid(row=4, column=0, padx=10, pady=5, sticky="w")
                  payment_options_var = tk.StringVar()
                  credit_card_check = tk.Checkbutton(root, text="Credit Card", variable=payment_or
                  credit card check.grid(row=4, column=1, padx=10, pady=5, sticky="w")
                  paypal check = tk.Checkbutton(root, text="PayPal", variable=payment options var,
                  paypal_check.grid(row=5, column=1, padx=10, pady=5, sticky="w")
                  bitcoin_check = tk.Checkbutton(root, text="Bitcoin", variable=payment_options_va
                  bitcoin check.grid(row=6, column=1, padx=10, pady=5, sticky="w")
                   submit button = tk.Button(root, text="Submit")
                  submit_button.grid(row=7, column=0, columnspan=2, pady=10)
                  root.mainloop()
```

2. Visualize your dataset using Matplotlib and write a program to create line graph, bar graph, scatter plot and correlation graph or heat map.

```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns

# Load your dataset (replace 'your_dataset.csv' with the actual file path)
```

```
data = pd.read_csv('ChrisAlister_218_Dataset.csv')
# Line Graph
plt.figure(figsize=(10, 6))
plt.plot(data['ProductID'], data['Price (INR)'], marker='o', linestyle='-')
plt.title('Line Graph')
plt.xlabel('ProductID')
plt.ylabel('Price (INR)')
plt.grid(True)
plt.show()
# Bar Graph (e.g., ProductBrand vs. Price)
plt.figure(figsize=(10, 6))
sns.barplot(x='ProductBrand', y='Price (INR)', data=data)
plt.title('Bar Graph')
plt.xlabel('ProductBrand')
plt.ylabel('Price (INR)')
plt.xticks(rotation=45)
plt.show()
# Scatter Plot (e.g., NumImages vs. Price)
plt.figure(figsize=(10, 6))
sns.scatterplot(x='NumImages', y='Price (INR)', data=data, hue='Gender')
plt.title('Scatter Plot')
plt.xlabel('NumImages')
plt.ylabel('Price (INR)')
plt.show()
# Correlation Heatmap
numeric columns = data.select dtypes(include=['number'])
correlation_matrix = numeric_columns.corr()
plt.figure(figsize=(10, 6))
sns.heatmap(correlation_matrix, annot=True, cmap='coolwarm', linewidths=.5)
plt.title('Correlation Heatmap')
plt.show()
```





