The following is the code used to extract the author names and write

the result into a file.

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"return self.func(\*args)\n",

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ipykernel\_53320\\1299222173.py\", line 21, in suggest\_products\n",

"selected\_category = product\_data[product\_data[’Product’] ==

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"import pandas as pd\n",

"import tkinter as tk\n",

"from tkinter import ttk\n",

" \n",

"data = {\n",

"’Product’:[’Ethnic wear’,’Ethnic wear’,’Sarees’,’Sarees’,’jeans’,

‘jeans’,’winter wear’,‘winter wear’,‘Tops’,‘Tops’,‘kurta’,‘kurta’,"’Category’:[’Fashion’,’Fashion’,’Fashion’,‘Fashion’],\n",

"’User’:[’User1’,’User2’,’User1’,’User3’,’User2’,’User3’,’User1’,

’User2’,’User1’,’User3’,’User2’,’User3’,’User1’,’User2’],\n",

"’Rating’:[4, 5, 5, 4, 4, 3, 4, 3, 5, 4, 5, 4, 5, 4]\n","}\n",

"df = pd.DataFrame(data)\n",

"df.to\_csv(’products.csv’, index=False)\n",

"\n",

"\n",

"\n",

"# Load the dataset\n",

"product\_data = pd.read\_csv(’products.csv’)\n",

"# Function to suggest products based on user input\n",

"def suggest\_products():\n",

"selected\_product = product\_dropdown.get()\n",

"selected\_category=product\_data[product\_data[’Product’]==

selected\_product][’Category’].values[0]\n",

"# Calculate the average rating for each product in the selected

category\n",

"avg\_ratings = product\_data[product\_data[’Category’] ==

selected\_category].groupby(’Product’)[’Rating’].mean()\n",

"# Sort products by average rating in descending order\n",

"suggestions = avg\_ratings.sort\_values(ascending=False)\n",

"# Get the top-rated product\n",

"top\_rated\_product = suggestions.index[0]\n",

"result\_text.set(f\"Suggested Product in {selected\_category}

category:\\n{top\_rated\_product}\")\n",

"# Create the tkinter window\n",

"window = tk.Tk()\n",

"window.title(\"Product Suggestions\")\n",

"window.geometry(\"400x300\")\n",

"# Label and Entry widgets for user input\n",

"tk.Label(window, text=\"Select Product:\").pack()\n",

"product\_dropdown = ttk.Combobox(window, values=product\_data

[’Product’].unique())\n",

"product\_dropdown.pack()\n",

"# Button to trigger product suggestion\n",

"suggest\_button = tk.Button(window, text=\"Get Suggestions\",

command=suggest\_products)\n",

"suggest\_button.pack()\n",

"# Label to display recommendations\n",

"result\_text = tk.StringVar()\n",

"tk.Label(window, textvariable=result\_text).pack()\n",

"# Run the tkinter main loop\n",

"window.mainloop()"

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