

```
In [5]: import pandas as pd
import numpy as np
from sklearn.preprocessing import StandardScaler
from sklearn.cluster import KMeans
from sklearn.metrics import davies_bouldin_score
import matplotlib.pyplot as plt
import seaborn as sns

# Load and merge data
customers = pd.read_csv('Customers.csv')
transactions = pd.read_csv('Transactions.csv')

# Create customer features
customer_purchase_features = transactions.groupby('CustomerID').agg({
    'Quantity': ['sum', 'mean', 'std'],
    'Price': ['mean', 'sum', 'std']
}).fillna(0)

customer_purchase_features.columns = ['total_quantity', 'avg_quantity', 'std_quantity',
                                     'avg_price', 'total_spend', 'std_price']

# Merge with customer demographics
customer_features = customers.merge(customer_purchase_features,
                                    left_on='CustomerID',
                                    right_index=True)

# Select features for clustering
features_for_clustering = ['total_quantity', 'avg_price', 'total_spend']
X = customer_features[features_for_clustering]

# Scale features
scaler = StandardScaler()
X_scaled = scaler.fit_transform(X)

# Calculate DB Index for different k values
db_scores = []
k_values = range(2, 11)

for k in k_values:
    kmeans = KMeans(n_clusters=k, random_state=42)
    labels = kmeans.fit_predict(X_scaled)
    db_score = davies_bouldin_score(X_scaled, labels)
    db_scores.append(db_score)

# Plot DB Index
plt.figure(figsize=(10, 6))
plt.plot(k_values, db_scores, 'bo-')
plt.xlabel('Number of Clusters (k)')
plt.ylabel('Davies-Bouldin Index')
plt.title('Davies-Bouldin Index vs Number of Clusters')
plt.grid(True)
plt.show()

# Choose optimal k and perform final clustering
optimal_k = k_values[np.argmin(db_scores)]
print(f"Optimal number of clusters: {optimal_k}")
print(f"Best DB Index score: {min(db_scores):.4f}")

final_kmeans = KMeans(n_clusters=optimal_k, random_state=42)
customer_features['Cluster'] = final_kmeans.fit_predict(X_scaled)

# Visualize clusters
from sklearn.decomposition import PCA
pca = PCA(n_components=2)
```

```
X_pca = pca.fit_transform(X_scaled)
```

```
plt.figure(figsize=(12, 8))
scatter = plt.scatter(X_pca[:, 0], X_pca[:, 1], c=customer_features['Cluster'],
                      cmap='viridis', alpha=0.6)
plt.xlabel('First Principal Component')
plt.ylabel('Second Principal Component')
plt.title('Customer Clusters Visualization (PCA)')
plt.colorbar(scatter)
plt.show()
```

```
# Calculate and display cluster profiles
```

```
cluster_profiles = customer_features.groupby('Cluster')[features_for_clustering].mean().
print("\
Cluster Profiles:")
print(cluster_profiles)
```

```
# Additional metrics
```

```
from sklearn.metrics import silhouette_score, calinski_harabasz_score
silhouette_avg = silhouette_score(X_scaled, customer_features['Cluster'])
calinski_score = calinski_harabasz_score(X_scaled, customer_features['Cluster'])

print("\
Additional Clustering Metrics:")
print(f"Silhouette Score: {silhouette_avg:.4f}")
print(f"Calinski-Harabasz Score: {calinski_score:.4f}")
```

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C:\Users\gunja\anaconda3\Lib\site-packages\sklearn\cluster\_kmeans.py:1412: FutureWarnin
g: The default value of `n_init` will change from 10 to 'auto' in 1.4. Set the value of
`n_init` explicitly to suppress the warning
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    super()._check_params_vs_input(X, default_n_init=10)
```

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C:\Users\gunja\anaconda3\Lib\site-packages\sklearn\cluster\_kmeans.py:1436: UserWarning:
KMeans is known to have a memory leak on Windows with MKL, when there are less chunks th
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    warnings.warn(
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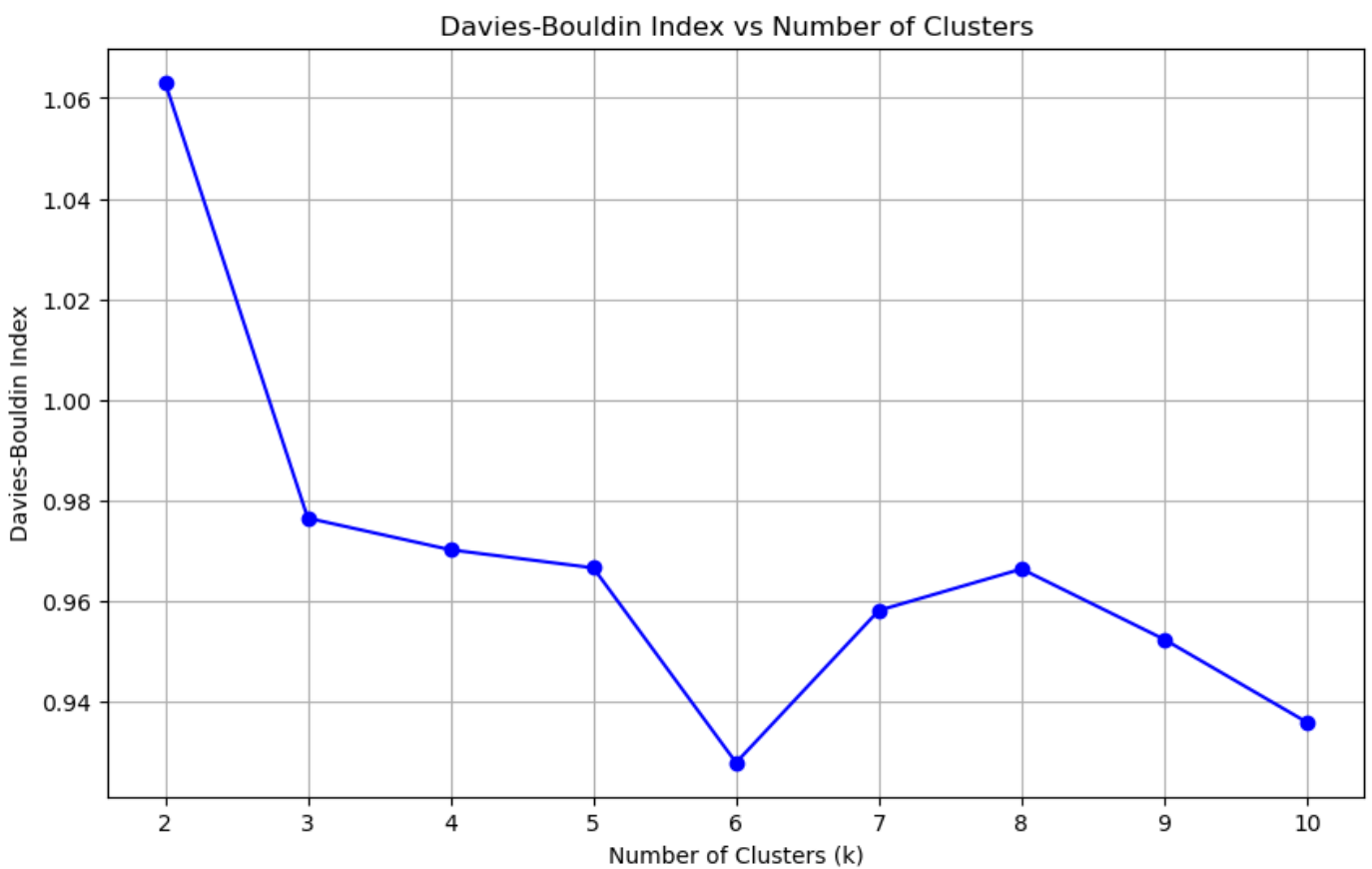
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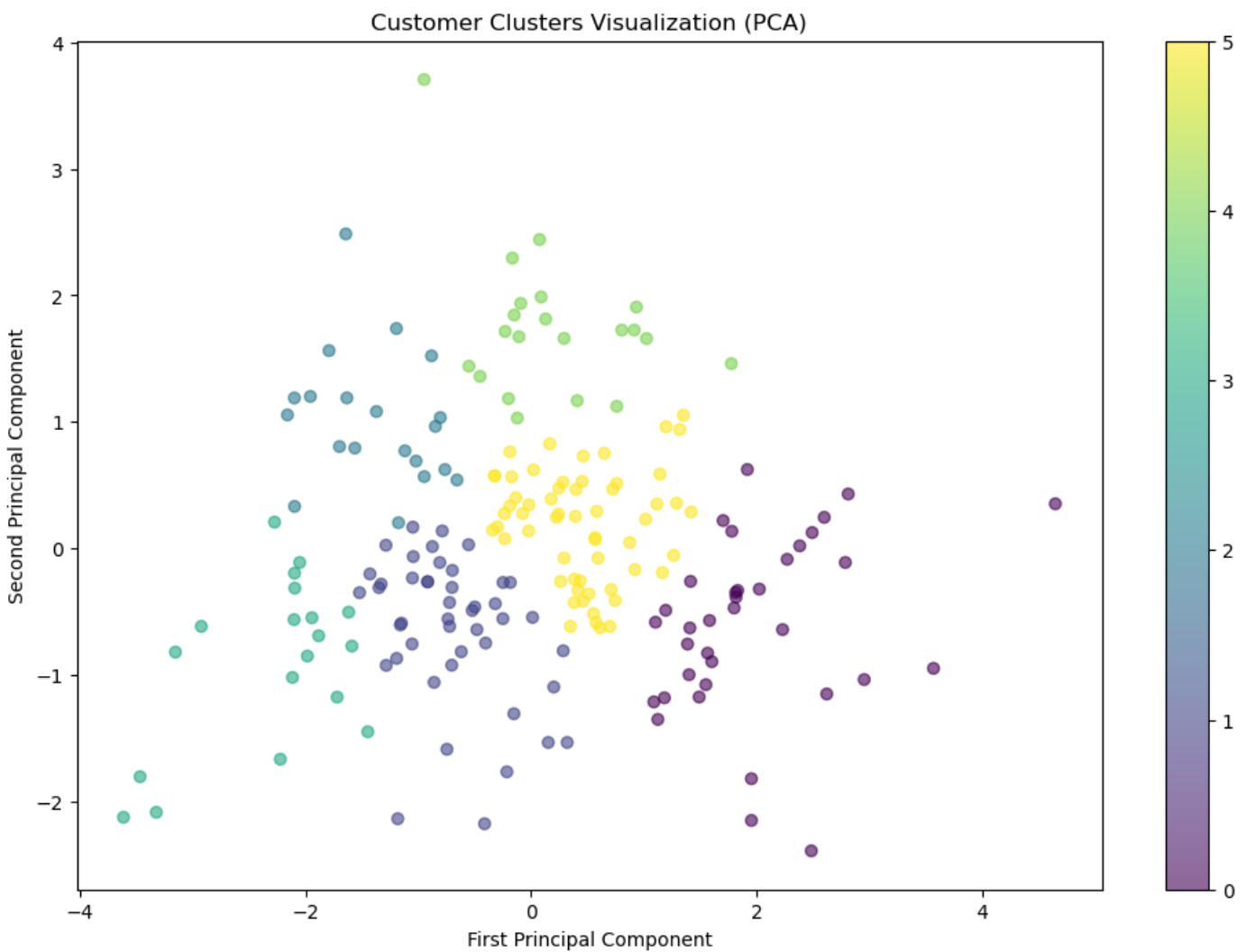
```



Optimal number of clusters: 6

Best DB Index score: 0.9278

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C:\Users\gunja\anaconda3\Lib\site-packages\sklearn\cluster\_kmeans.py:1412: FutureWarning: The default value of 'n_init' will change from 10 to 'auto' in 1.4. Set the value of 'n_init' explicitly to suppress the warning
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C:\Users\gunja\anaconda3\Lib\site-packages\sklearn\cluster\_kmeans.py:1436: UserWarning: KMeans is known to have a memory leak on Windows with MKL, when there are less chunks than available threads. You can avoid it by setting the environment variable OMP_NUM_THREADS=1.
  warnings.warn(
```



Cluster Profiles:

	total_quantity	avg_price	total_spend
Cluster			
0	22.19	280.31	2291.30
1	12.24	218.61	1006.14
2	5.00	305.26	675.56
3	5.63	158.67	403.60
4	9.00	387.18	1399.61
5	13.64	291.38	1624.48

Additional Clustering Metrics:

Silhouette Score: 0.3194

Calinski-Harabasz Score: 119.2956

```
In [9]: pip install nbconvert[webpdf]
```

Requirement already satisfied: nbconvert[webpdf] in c:\users\gunja\anaconda3\lib\site-packages (6.5.4)

Requirement already satisfied: lxml in c:\users\gunja\anaconda3\lib\site-packages (from nbconvert[webpdf]) (4.9.3)

Requirement already satisfied: beautifulsoup4 in c:\users\gunja\anaconda3\lib\site-packages (from nbconvert[webpdf]) (4.12.2)

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Requirement already satisfied: Jinja2>=3.0 in c:\users\gunja\anaconda3\lib\site-packages (from nbconvert[webpdf]) (3.1.2)

Requirement already satisfied: jupyter-core>=4.7 in c:\users\gunja\anaconda3\lib\site-packages (from nbconvert[webpdf]) (5.3.0)

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Collecting pyppeteer<1.1,>=1 (from nbconvert[webpdf])
Obtaining dependency information for pyppeteer<1.1,>=1 from https://files.pythonhosted.org/packages/10/46/33c0a9e7d37bf33487074de4399963462093043ad224d1881e41cbd937f3/pyppeteer-1.0.2-py3-none-any.whl.metadata
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Collecting pyee<9.0.0,>=8.1.0 (from pyppeteer<1.1,>=1->nbconvert[webpdf])
Obtaining dependency information for pyee<9.0.0,>=8.1.0 from https://files.pythonhosted.org/packages/56/37/29d137df23ed1d88d8dcee8a6b8e789d1162042f194b5ccd0a48f503429b/pyee-8.2.2-py2.py3-none-any.whl.metadata
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Requirement already satisfied: tqdm<5.0.0,>=4.42.1 in c:\users\gunja\anaconda3\lib\site-packages (from pyppeteer<1.1,>=1->nbconvert[webpdf]) (4.65.0)
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Requirement already satisfied: colorama in c:\users\gunja\anaconda3\lib\site-packages (from tqdm<5.0.0,>=4.42.1->pyppeteer<1.1,>=1->nbconvert[webpdf]) (0.4.6)
Downloading pyppeteer-1.0.2-py3-none-any.whl (83 kB)
----- 0.0/83.4 kB ? eta -:--:--
----- 10.2/83.4 kB ? eta -:--:--
----- 81.9/83.4 kB 1.1 MB/s eta 0:00:01
----- 83.4/83.4 kB 937.7 kB/s eta 0:00:00
Downloading pyee-8.2.2-py2.py3-none-any.whl (12 kB)
Downloading websockets-10.4-cp311-cp311-win_amd64.whl (101 kB)
----- 0.0/101.4 kB ? eta -:--:--
----- 71.7/101.4 kB 2.0 MB/s eta 0:00:01
----- 101.4/101.4 kB 2.0 MB/s eta 0:00:00
Installing collected packages: pyee, websockets, pyppeteer
Successfully installed pyee-8.2.2 pyppeteer-1.0.2 websockets-10.4
Note: you may need to restart the kernel to use updated packages.

```

In [11]: `!jupyter nbconvert --to webpdf --allow-chromium-download Gunjan_Agarwal_Clustering.ipynb`

```

[NbConvertApp] Converting notebook Gunjan_Agarwal_Clustering.ipynb to webpdf
[NbConvertApp] Building PDF
[INFO] Starting Chromium download.

```

```

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10% 9		13.4M/137M	[00:06<00:42, 2.94Mb/s]
10% #		13.7M/137M	[00:06<00:55, 2.21Mb/s]
10% #		14.0M/137M	[00:06<00:55, 2.22Mb/s]
11% #		14.4M/137M	[00:06<00:47, 2.61Mb/s]
11% #		14.7M/137M	[00:06<00:46, 2.60Mb/s]
11% #		15.0M/137M	[00:06<00:43, 2.80Mb/s]
11% #1		15.3M/137M	[00:06<00:41, 2.90Mb/s]
11% #1		15.6M/137M	[00:07<00:53, 2.29Mb/s]
12% #1		15.9M/137M	[00:07<00:52, 2.30Mb/s]
12% #1		16.1M/137M	[00:07<00:55, 2.18Mb/s]
12% #1		16.4M/137M	[00:07<00:52, 2.29Mb/s]
12% #2		16.7M/137M	[00:07<00:53, 2.25Mb/s]
12% #2		16.9M/137M	[00:07<00:52, 2.27Mb/s]
13% #2		17.1M/137M	[00:07<00:54, 2.22Mb/s]
13% #2		17.5M/137M	[00:07<00:47, 2.50Mb/s]
13% #2		17.7M/137M	[00:08<00:47, 2.53Mb/s]
13% #3		18.0M/137M	[00:08<00:56, 2.10Mb/s]
13% #3		18.2M/137M	[00:08<01:07, 1.76Mb/s]
14% #3		18.8M/137M	[00:08<00:46, 2.56Mb/s]
14% #3		19.1M/137M	[00:08<00:42, 2.79Mb/s]
14% #4		19.4M/137M	[00:08<00:42, 2.76Mb/s]
14% #4		19.8M/137M	[00:08<00:42, 2.76Mb/s]
15% #4		20.1M/137M	[00:08<00:41, 2.82Mb/s]
15% #4		20.4M/137M	[00:09<00:44, 2.62Mb/s]
15% #5		20.8M/137M	[00:09<00:38, 3.00Mb/s]
15% #5		21.1M/137M	[00:09<00:38, 2.99Mb/s]
16% #5		21.4M/137M	[00:09<00:38, 3.01Mb/s]
16% #5		21.7M/137M	[00:09<00:40, 2.85Mb/s]
16% #6		22.0M/137M	[00:09<00:44, 2.56Mb/s]
16% #6		22.3M/137M	[00:09<00:42, 2.71Mb/s]
17% #6		22.6M/137M	[00:09<00:40, 2.80Mb/s]
17% #6		22.9M/137M	[00:09<00:40, 2.80Mb/s]
17% #6		23.2M/137M	[00:10<00:46, 2.43Mb/s]
17% #7		23.5M/137M	[00:10<00:47, 2.38Mb/s]
17% #7		23.7M/137M	[00:10<00:47, 2.37Mb/s]
18% #7		24.0M/137M	[00:10<00:45, 2.47Mb/s]
18% #7		24.3M/137M	[00:10<00:45, 2.47Mb/s]
18% #8		24.7M/137M	[00:10<00:38, 2.88Mb/s]
18% #8		25.0M/137M	[00:10<00:37, 2.97Mb/s]
18% #8		25.3M/137M	[00:10<00:40, 2.74Mb/s]
19% #8		25.7M/137M	[00:10<00:37, 2.94Mb/s]
19% #8		26.0M/137M	[00:11<00:36, 3.02Mb/s]
19% #9		26.3M/137M	[00:11<00:37, 2.93Mb/s]
19% #9		26.6M/137M	[00:11<00:38, 2.90Mb/s]
20% #9		26.9M/137M	[00:11<00:36, 3.00Mb/s]
20% #9		27.2M/137M	[00:11<00:37, 2.91Mb/s]
20% ##		27.6M/137M	[00:11<00:35, 3.09Mb/s]
20% ##		27.9M/137M	[00:11<00:34, 3.19Mb/s]
21% ##		28.3M/137M	[00:11<00:33, 3.22Mb/s]

21% ##		28.6M/137M	[00:11<00:38, 2.78Mb/s]
21% ##1		28.9M/137M	[00:12<00:41, 2.63Mb/s]
21% ##1		29.3M/137M	[00:12<00:36, 2.93Mb/s]
22% ##1		29.6M/137M	[00:12<00:38, 2.77Mb/s]
22% ##1		29.9M/137M	[00:12<00:39, 2.68Mb/s]
22% ##2		30.2M/137M	[00:12<00:42, 2.52Mb/s]
22% ##2		30.5M/137M	[00:12<00:39, 2.73Mb/s]
23% ##2		30.8M/137M	[00:12<00:41, 2.54Mb/s]
23% ##2		31.1M/137M	[00:12<00:39, 2.71Mb/s]
23% ##2		31.4M/137M	[00:13<00:38, 2.71Mb/s]
23% ##3		31.7M/137M	[00:13<00:38, 2.72Mb/s]
23% ##3		32.0M/137M	[00:13<00:41, 2.54Mb/s]
24% ##3		32.3M/137M	[00:13<00:44, 2.36Mb/s]
24% ##3		32.5M/137M	[00:13<00:54, 1.90Mb/s]
24% ##3		32.7M/137M	[00:13<00:55, 1.89Mb/s]
24% ##4		33.0M/137M	[00:13<00:53, 1.95Mb/s]
24% ##4		33.2M/137M	[00:13<00:52, 1.97Mb/s]
24% ##4		33.4M/137M	[00:14<00:50, 2.05Mb/s]
25% ##4		33.7M/137M	[00:14<00:46, 2.21Mb/s]
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25% ##4		34.2M/137M	[00:14<00:47, 2.16Mb/s]
25% ##5		34.4M/137M	[00:14<00:47, 2.14Mb/s]
25% ##5		34.6M/137M	[00:14<00:47, 2.16Mb/s]
25% ##5		34.9M/137M	[00:14<00:52, 1.94Mb/s]
26% ##5		35.2M/137M	[00:14<00:46, 2.18Mb/s]
26% ##5		35.4M/137M	[00:15<00:53, 1.91Mb/s]
26% ##5		35.6M/137M	[00:15<00:57, 1.76Mb/s]
26% ##6		35.9M/137M	[00:15<00:49, 2.03Mb/s]
26% ##6		36.1M/137M	[00:15<00:48, 2.09Mb/s]
27% ##6		36.4M/137M	[00:15<00:42, 2.34Mb/s]
27% ##6		36.7M/137M	[00:15<00:41, 2.44Mb/s]
27% ##7		37.0M/137M	[00:15<00:39, 2.53Mb/s]
27% ##7		37.3M/137M	[00:15<00:37, 2.62Mb/s]
27% ##7		37.6M/137M	[00:15<00:41, 2.41Mb/s]
28% ##7		37.8M/137M	[00:16<00:49, 1.99Mb/s]
28% ##7		38.0M/137M	[00:16<00:59, 1.65Mb/s]
28% ##7		38.2M/137M	[00:16<01:00, 1.62Mb/s]
28% ##8		38.4M/137M	[00:16<01:02, 1.57Mb/s]
28% ##8		38.6M/137M	[00:16<00:59, 1.65Mb/s]
28% ##8		38.7M/137M	[00:16<00:59, 1.66Mb/s]
28% ##8		38.9M/137M	[00:16<01:00, 1.61Mb/s]
29% ##8		39.1M/137M	[00:16<01:08, 1.43Mb/s]
29% ##8		39.2M/137M	[00:17<01:19, 1.23Mb/s]
29% ##8		39.4M/137M	[00:17<01:38, 989kb/s]
29% ##8		39.5M/137M	[00:17<02:29, 654kb/s]
29% ##8		39.6M/137M	[00:17<02:20, 693kb/s]
29% ##8		39.7M/137M	[00:18<02:23, 677kb/s]
29% ##9		39.8M/137M	[00:18<02:15, 714kb/s]
29% ##9		39.9M/137M	[00:18<02:19, 693kb/s]
29% ##9		40.0M/137M	[00:18<02:04, 778kb/s]
29% ##9		40.1M/137M	[00:18<02:20, 690kb/s]
29% ##9		40.2M/137M	[00:18<02:58, 542kb/s]
29% ##9		40.2M/137M	[00:18<02:54, 553kb/s]
29% ##9		40.3M/137M	[00:19<02:46, 582kb/s]
30% ##9		40.4M/137M	[00:19<03:18, 486kb/s]
30% ##9		40.5M/137M	[00:19<03:34, 449kb/s]
30% ##9		40.6M/137M	[00:19<02:29, 645kb/s]
30% ##9		40.8M/137M	[00:19<01:36, 998kb/s]
30% ##9		41.0M/137M	[00:19<01:22, 1.16Mb/s]
30% ###		41.2M/137M	[00:19<01:15, 1.26Mb/s]
30% ###		41.3M/137M	[00:19<01:13, 1.31Mb/s]
30% ###		41.7M/137M	[00:20<00:53, 1.79Mb/s]
31% ###		42.0M/137M	[00:20<00:43, 2.17Mb/s]
31% ###		42.3M/137M	[00:20<00:40, 2.34Mb/s]
31% ###1		42.5M/137M	[00:20<00:45, 2.08Mb/s]
31% ###1		42.7M/137M	[00:20<00:47, 1.97Mb/s]

31%	###1		43.0M/137M	[00:20<00:45, 2.05Mb/s]
32%	###1		43.2M/137M	[00:20<00:45, 2.05Mb/s]
32%	###1		43.4M/137M	[00:20<00:45, 2.08Mb/s]
32%	###1		43.7M/137M	[00:20<00:40, 2.32Mb/s]
32%	###2		44.0M/137M	[00:21<00:43, 2.16Mb/s]
32%	###2		44.3M/137M	[00:21<00:37, 2.46Mb/s]
33%	###2		44.6M/137M	[00:21<00:35, 2.58Mb/s]
33%	###2		44.9M/137M	[00:21<00:35, 2.60Mb/s]
33%	###2		45.1M/137M	[00:21<00:37, 2.42Mb/s]
33%	###3		45.4M/137M	[00:21<00:38, 2.38Mb/s]
33%	###3		45.7M/137M	[00:21<00:35, 2.55Mb/s]
34%	###3		46.1M/137M	[00:21<00:33, 2.73Mb/s]
34%	###3		46.4M/137M	[00:21<00:30, 2.95Mb/s]
34%	###4		46.7M/137M	[00:22<00:30, 3.00Mb/s]
34%	###4		47.1M/137M	[00:22<00:31, 2.89Mb/s]
35%	###4		47.3M/137M	[00:22<00:34, 2.62Mb/s]
35%	###4		47.6M/137M	[00:22<00:33, 2.67Mb/s]
35%	###5		47.9M/137M	[00:22<00:35, 2.53Mb/s]
35%	###5		48.2M/137M	[00:22<00:38, 2.30Mb/s]
35%	###5		48.4M/137M	[00:22<00:38, 2.30Mb/s]
36%	###5		48.7M/137M	[00:22<00:36, 2.39Mb/s]
36%	###5		48.9M/137M	[00:23<00:36, 2.39Mb/s]
36%	###5		49.2M/137M	[00:23<00:41, 2.13Mb/s]
36%	###6		49.4M/137M	[00:23<00:41, 2.09Mb/s]
36%	###6		49.7M/137M	[00:23<00:38, 2.28Mb/s]
36%	###6		50.0M/137M	[00:23<00:38, 2.27Mb/s]
37%	###6		50.2M/137M	[00:23<00:42, 2.03Mb/s]
37%	###6		50.4M/137M	[00:23<00:41, 2.07Mb/s]
37%	###7		50.7M/137M	[00:23<00:39, 2.17Mb/s]
37%	###7		50.9M/137M	[00:23<00:39, 2.20Mb/s]
37%	###7		51.1M/137M	[00:24<00:39, 2.20Mb/s]
38%	###7		51.4M/137M	[00:24<00:36, 2.32Mb/s]
38%	###7		51.7M/137M	[00:24<00:40, 2.09Mb/s]
38%	###7		51.9M/137M	[00:24<00:46, 1.83Mb/s]
38%	###8		52.1M/137M	[00:24<00:42, 1.97Mb/s]
38%	###8		52.4M/137M	[00:24<00:39, 2.16Mb/s]
38%	###8		52.6M/137M	[00:24<00:37, 2.24Mb/s]
39%	###8		52.9M/137M	[00:24<00:41, 2.05Mb/s]
39%	###8		53.2M/137M	[00:25<00:35, 2.33Mb/s]
39%	###9		53.5M/137M	[00:25<00:35, 2.34Mb/s]
39%	###9		53.7M/137M	[00:25<00:35, 2.34Mb/s]
39%	###9		54.0M/137M	[00:25<00:35, 2.34Mb/s]
40%	###9		54.2M/137M	[00:25<00:36, 2.27Mb/s]
40%	###9		54.5M/137M	[00:25<00:34, 2.36Mb/s]
40%	###9		54.7M/137M	[00:25<00:34, 2.37Mb/s]
40%	####		55.0M/137M	[00:25<00:35, 2.30Mb/s]
40%	####		55.3M/137M	[00:25<00:32, 2.48Mb/s]
41%	####		55.5M/137M	[00:26<00:36, 2.20Mb/s]
41%	####		55.8M/137M	[00:26<00:36, 2.20Mb/s]
41%	####		56.0M/137M	[00:26<00:36, 2.22Mb/s]
41%	####1		56.3M/137M	[00:26<00:35, 2.28Mb/s]
41%	####1		56.6M/137M	[00:26<00:33, 2.39Mb/s]
42%	####1		56.8M/137M	[00:26<00:33, 2.41Mb/s]
42%	####1		57.1M/137M	[00:26<00:38, 2.08Mb/s]
42%	####1		57.3M/137M	[00:26<00:41, 1.92Mb/s]
42%	####2		57.6M/137M	[00:27<00:39, 2.03Mb/s]
42%	####2		57.8M/137M	[00:27<00:35, 2.24Mb/s]
42%	####2		58.1M/137M	[00:27<00:34, 2.28Mb/s]
43%	####2		58.3M/137M	[00:27<00:33, 2.33Mb/s]
43%	####2		58.6M/137M	[00:27<00:48, 1.62Mb/s]
43%	####2		58.8M/137M	[00:27<00:49, 1.59Mb/s]
43%	####3		59.0M/137M	[00:27<00:46, 1.67Mb/s]
43%	####3		59.2M/137M	[00:27<00:43, 1.79Mb/s]
43%	####3		59.4M/137M	[00:28<00:49, 1.55Mb/s]
43%	####3		59.6M/137M	[00:28<00:49, 1.57Mb/s]
44%	####3		59.8M/137M	[00:28<00:43, 1.76Mb/s]

44%	#####3		60.0M/137M	[00:28<00:43,	1.75Mb/s]
44%	#####3		60.2M/137M	[00:28<00:39,	1.92Mb/s]
44%	#####4		60.5M/137M	[00:28<00:37,	2.03Mb/s]
44%	#####4		60.7M/137M	[00:28<00:39,	1.95Mb/s]
45%	#####4		61.0M/137M	[00:28<00:35,	2.12Mb/s]
45%	#####4		61.3M/137M	[00:28<00:34,	2.18Mb/s]
45%	#####4		61.5M/137M	[00:29<00:34,	2.19Mb/s]
45%	#####5		61.7M/137M	[00:29<00:34,	2.16Mb/s]
45%	#####5		62.0M/137M	[00:29<00:32,	2.31Mb/s]
45%	#####5		62.2M/137M	[00:29<00:31,	2.34Mb/s]
46%	#####5		62.5M/137M	[00:29<00:34,	2.15Mb/s]
46%	#####5		62.8M/137M	[00:29<00:30,	2.41Mb/s]
46%	#####6		63.1M/137M	[00:29<00:30,	2.41Mb/s]
46%	#####6		63.3M/137M	[00:29<00:30,	2.44Mb/s]
47%	#####6		63.7M/137M	[00:29<00:27,	2.66Mb/s]
47%	#####6		64.0M/137M	[00:30<00:28,	2.57Mb/s]
47%	#####6		64.2M/137M	[00:30<00:30,	2.38Mb/s]
47%	#####7		64.5M/137M	[00:30<00:30,	2.36Mb/s]
47%	#####7		64.7M/137M	[00:30<00:31,	2.32Mb/s]
47%	#####7		65.0M/137M	[00:30<00:37,	1.92Mb/s]
48%	#####7		65.2M/137M	[00:30<00:46,	1.53Mb/s]
48%	#####7		65.5M/137M	[00:30<00:36,	1.96Mb/s]
48%	#####8		65.8M/137M	[00:31<00:33,	2.12Mb/s]
48%	#####8		66.2M/137M	[00:31<00:28,	2.46Mb/s]
49%	#####8		66.4M/137M	[00:31<00:28,	2.49Mb/s]
49%	#####8		66.7M/137M	[00:31<00:28,	2.49Mb/s]
49%	#####8		67.1M/137M	[00:31<00:25,	2.70Mb/s]
49%	#####9		67.4M/137M	[00:31<00:25,	2.71Mb/s]
49%	#####9		67.7M/137M	[00:31<00:25,	2.69Mb/s]
50%	#####9		68.0M/137M	[00:31<00:27,	2.48Mb/s]
50%	#####9		68.2M/137M	[00:31<00:29,	2.33Mb/s]
50%	#####9		68.5M/137M	[00:32<00:29,	2.32Mb/s]
50%	#####		68.7M/137M	[00:32<00:29,	2.30Mb/s]
50%	#####		69.0M/137M	[00:32<00:27,	2.47Mb/s]
51%	#####		69.3M/137M	[00:32<00:25,	2.65Mb/s]
51%	#####		69.7M/137M	[00:32<00:23,	2.88Mb/s]
51%	#####1		70.0M/137M	[00:32<00:25,	2.59Mb/s]
51%	#####1		70.2M/137M	[00:32<00:28,	2.31Mb/s]
51%	#####1		70.5M/137M	[00:33<00:42,	1.58Mb/s]
52%	#####1		70.7M/137M	[00:33<00:46,	1.42Mb/s]
52%	#####1		70.9M/137M	[00:33<00:45,	1.45Mb/s]
52%	#####1		71.1M/137M	[00:33<00:38,	1.72Mb/s]
52%	#####2		71.4M/137M	[00:33<00:34,	1.87Mb/s]
52%	#####2		71.6M/137M	[00:33<00:34,	1.92Mb/s]
52%	#####2		71.9M/137M	[00:33<00:31,	2.06Mb/s]
53%	#####2		72.1M/137M	[00:33<00:31,	2.07Mb/s]
53%	#####2		72.3M/137M	[00:33<00:31,	2.03Mb/s]
53%	#####2		72.5M/137M	[00:34<00:30,	2.08Mb/s]
53%	#####3		72.8M/137M	[00:34<00:29,	2.15Mb/s]
53%	#####3		73.1M/137M	[00:34<00:27,	2.29Mb/s]
54%	#####3		73.3M/137M	[00:34<00:31,	2.01Mb/s]
54%	#####3		73.6M/137M	[00:34<00:27,	2.34Mb/s]
54%	#####3		73.9M/137M	[00:34<00:25,	2.50Mb/s]
54%	#####4		74.2M/137M	[00:34<00:24,	2.57Mb/s]
54%	#####4		74.6M/137M	[00:34<00:22,	2.73Mb/s]
55%	#####4		74.9M/137M	[00:34<00:22,	2.71Mb/s]
55%	#####4		75.2M/137M	[00:35<00:21,	2.81Mb/s]
55%	#####5		75.5M/137M	[00:35<00:24,	2.53Mb/s]
55%	#####5		75.7M/137M	[00:35<00:23,	2.61Mb/s]
56%	#####5		76.1M/137M	[00:35<00:21,	2.81Mb/s]
56%	#####5		76.5M/137M	[00:35<00:19,	3.07Mb/s]
56%	#####6		76.8M/137M	[00:35<00:21,	2.84Mb/s]
56%	#####6		77.1M/137M	[00:35<00:22,	2.64Mb/s]
57%	#####6		77.4M/137M	[00:35<00:22,	2.70Mb/s]
57%	#####6		77.8M/137M	[00:36<00:20,	2.95Mb/s]
57%	#####7		78.2M/137M	[00:36<00:18,	3.13Mb/s]

57%	#####7		78.5M/137M	[00:36<00:18,	3.13Mb/s]
58%	#####7		78.8M/137M	[00:36<00:18,	3.16Mb/s]
58%	#####7		79.2M/137M	[00:36<00:20,	2.84Mb/s]
58%	#####8		79.6M/137M	[00:36<00:17,	3.23Mb/s]
58%	#####8		80.0M/137M	[00:36<00:17,	3.33Mb/s]
59%	#####8		80.3M/137M	[00:36<00:20,	2.74Mb/s]
59%	#####8		80.6M/137M	[00:36<00:20,	2.78Mb/s]
59%	#####9		81.0M/137M	[00:37<00:19,	2.85Mb/s]
59%	#####9		81.3M/137M	[00:37<00:18,	2.94Mb/s]
60%	#####9		81.6M/137M	[00:37<00:18,	3.03Mb/s]
60%	#####9		81.9M/137M	[00:37<00:18,	3.05Mb/s]
60%	#####		82.2M/137M	[00:37<00:18,	3.00Mb/s]
60%	#####		82.6M/137M	[00:37<00:16,	3.21Mb/s]
61%	#####		82.9M/137M	[00:37<00:18,	2.85Mb/s]
61%	#####		83.3M/137M	[00:37<00:18,	2.88Mb/s]
61%	#####1		83.5M/137M	[00:37<00:18,	2.86Mb/s]
61%	#####1		83.8M/137M	[00:38<00:22,	2.36Mb/s]
61%	#####1		84.1M/137M	[00:38<00:25,	2.10Mb/s]
62%	#####1		84.4M/137M	[00:38<00:22,	2.30Mb/s]
62%	#####1		84.7M/137M	[00:38<00:21,	2.39Mb/s]
62%	#####2		84.9M/137M	[00:38<00:22,	2.36Mb/s]
62%	#####2		85.2M/137M	[00:38<00:23,	2.23Mb/s]
62%	#####2		85.5M/137M	[00:38<00:21,	2.42Mb/s]
63%	#####2		85.8M/137M	[00:38<00:19,	2.65Mb/s]
63%	#####2		86.1M/137M	[00:39<00:21,	2.40Mb/s]
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63%	#####3		86.9M/137M	[00:39<00:22,	2.26Mb/s]
64%	#####3		87.3M/137M	[00:39<00:19,	2.61Mb/s]
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72%	#####2		98.7M/137M	[00:44<00:19,	1.98Mb/s]
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100%|#####9 | 137M/137M [00:58<00:00, 1.74Mb/s]
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[INFO] Beginning extraction

[INFO] Chromium extracted to: C:\Users\gunja\AppData\Local\pypeteer\pypeteer\local-chromium\588429

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In []: