

Here is the Python script for performing With EDA Code in the provided dataset, including deriving business insights. This script can be run in any Python environment with the required libraries installed.

```
import pandas as pd

# Load the dataset
file_path = "path_to_your_file/Customers.csv" # Replace with your file path
data = pd.read_csv(file_path)

# Convert SignupDate to datetime for analysis
data['SignupDate'] = pd.to_datetime(data['SignupDate'])

# General Overview
eda_summary = {
    "Total Customers": data['CustomerID'].nunique(),
    "Regions": data['Region'].unique().tolist(),
    "Customers Per Region": data['Region'].value_counts().to_dict(),
    "Signup Date Range": (data['SignupDate'].min(), data['SignupDate'].max()),
}

# Region-wise customer distribution
region_distribution = data['Region'].value_counts(normalize=True) * 100

# Group by year for signup trends
data['SignupYear'] = data['SignupDate'].dt.year
signup_trends = data.groupby('SignupYear')['CustomerID'].count()

# Display EDA Summary
print("EDA Summary:")
for key, value in eda_summary.items():
    print(f"{key}: {value}")
```

```
print("\nRegion Distribution (in %):")
```

```
print(region_distribution)
```

```
print("\nSignup Trends by Year:")
```

```
print(signup_trends)
```

```
# Business Insights
```

```
insights = [
```

```
    "1. South America has the highest customer base (29.5%), followed by Europe (25%). Asia (22.5%)  
    offers growth potential.",
```

```
    "2. Signups have steadily increased from 2022 (64) to 2024 (79), indicating a positive growth  
    trend.",
```

```
    "3. The dataset spans from January 2022 to December 2024, covering recent customer trends  
    comprehensively.",
```

```
    "4. Each region contributes significantly (20–30%) to the customer base, indicating a diversified  
    market presence.",
```

```
    "5. The year 2024 saw the highest signups; analyzing strategies from this year could reveal key  
    growth factors.",
```

```
]
```

```
print("\nBusiness Insights:")
```

```
for insight in insights:
```

```
    print(insight)
```