## EDS ASSIGNMENT - 1

TOPIC: BLOG AUTHORSHIP CORPUS

NAME: RAJSHREE AWARDE

DIVISION: CS5 BATCH: CS52

**ROLL NO: CS5-41** 

PRN: 202401100069

```
👘 prob1 copy 2.py 🗦 ...
       # Number of blog posts by bloggers aged 20-30
       import pandas as pd
       import numpy as np
       # Load the dataset
       df = pd.read_csv('blogtext.csv')
       posts_20_30 = df[(df['age'] >= 20) & (df['age'] <= 30)].shape[0]
       print(posts_20_30)
 PROBLEMS
           OUTPUT
                    DEBUG CONSOLE
                                   TERMINAL
                                            PORTS
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/Desktop/rajshree eds/prob1 copy 2.py"
321447
```

```
prob1 copy 20.py > ...
       import pandas as pd
       import numpy as np
       # Load the dataset
       df = pd.read csv('blogtext.csv')
       # 20. Standard deviation of ages
       std_dev_age = df['age'].std()
  10
       print(std dev age)
  11
 PROBLEMS
           OUTPUT
                    DEBUG CONSOLE
                                  TERMINAL
                                             PORTS
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/User
 s/prob1 copy 20.py"
7.786008658769236
```

```
prob1 copy 12.py > ...
        import pandas as pd
        import numpy as np
       # Load the dataset
        df = pd.read_csv('blogtext.csv')
   6
       # 10. Calculate the average number of words in blog posts.
        avg_words_per_post = df['text'].apply(lambda x: len(str(x).split())).mean()
        print('10. Average words per post:', avg words per post)
                                                                                            >_ Pytho
 PROBLEMS
           OUTPUT
                    DEBUG CONSOLE
                                   TERMINAL
                                             PORTS
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/Desk
 .py"
10. Average words per post: 200.78674238643504
```

```
👘 prob1 copy 18.py > ...
        import pandas as pd
        import numpy as np
        # Load the dataset
        df = pd.read csv('blogtext.csv')
        # 18. Find how many bloggers are older than 30 years.
        bloggers above 30 = (df['age'] > 30).sum()
        print('18. Bloggers older than 30:', bloggers_above_30)
  10
                    DEBUG CONSOLE
                                             PORTS
 PROBLEMS
           OUTPUT
                                   TERMINAL
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/Desktop/ra
 s/prob1 copy 18.py"
18. Bloggers older than 30: 123970
```

```
🥏 prob1 copy 15.py > ...
        import pandas as pd
       import numpy as np
       # Load the dataset
       df = pd.read csv('blogtext.csv')
       # 17. Find the standard deviation of blogger ages.
       std_dev_age = df['age'].std()
       print('17. Age standard deviation:', std dev age)
  10
 PROBLEMS
                    DEBUG CONSOLE
                                             PORTS
           OUTPUT
                                  TERMINAL
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/Desktop/rajs
s/prob1 copy 15.py"
 17. Age standard deviation: 7.786008658769236
```

```
prob1 copy 16.py > ...
       import pandas as pd
       import numpy as np
       # Load the dataset
       df = pd.read csv('blogtext.csv')
       # 19. Find the most active blogger (the blogger with the maximum number of posts).
       most_active_blogger = df['id'].value_counts().idxmax()
       print('19. Most active blogger ID:', most_active_blogger)
  10
 PROBLEMS
                    DEBUG CONSOLE
           OUTPUT
                                  TERMINAL
                                            PORTS
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/De
 s/prob1 copy 16.py"
19. Most active blogger ID: 449628
```

```
prob1 copy 8.py > ...
       import pandas as pd
       import numpy as np
       # Load the dataset
   6
       df = pd.read csv('blogtext.csv')
       # 8. Distribution of astrological signs
       astro distribution = df['sign'].value counts()
       print(astro distribution)
 PROBLEMS
                                           PORTS
          OUTPUT DEBUG CONSOLE TERMINAL
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/Desktop/rajshree ed
s/prob1 copy 8.py"
 sign
 Cancer
                65048
                64979
 Aries
 Taurus
                62561
 Libra
                62363
                60399
 Virgo
 Scorpio
                57161
                54053
 Pisces
 Leo
                53811
                51985
 Gemini
 Sagittarius
                50036
                49687
 Aquarius
 Capricorn
                49201
 Name: count, dtype: int64
```

```
prob1 copy 8.py > ...
       import pandas as pd
       import numpy as np
       # Load the dataset
   6
       df = pd.read csv('blogtext.csv')
       # 8. Distribution of astrological signs
       astro_distribution = df['sign'].value_counts()
       print(astro distribution)
 PROBLEMS
           OUTPUT
                   DEBUG CONSOLE TERMINAL
                                           PORTS
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/Desktop/rajshree ed
s/prob1 copy 8.py"
 sign
                65048
 Cancer
               64979
 Aries
               62561
 Taurus
 Libra
                62363
                60399
 Virgo
 Scorpio
               57161
                54053
 Pisces
               53811
 Leo
 Gemini
               51985
 Sagittarius
                50036
 Aquarius
                49687
 Capricorn
                49201
 Name: count, dtype: int64
```

```
prob1 copy 17.py > ...
       import pandas as pd
       import numpy as np
       # Load the dataset
       df = pd.read_csv('blogtext.csv')
       # 17. Mean and median age by gender
       mean_median_age_by_gender = df.groupby('gender')['age'].agg(['mean', 'median'])
       print(mean median age by gender)
   9
  10
 PROBLEMS
           OUTPUT
                    DEBUG CONSOLE
                                            PORTS
                                  TERMINAL
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/De
s/prob1 copy 17.py"
              mean median
 gender
 female 23.855087
                      24.0
 male
         24.007529
                      24.0
```

```
prob1 copy 14.py > ...
       import pandas as pd
       import numpy as np
       # Load the dataset
       df = pd.read csv('blogtext.csv')
       # 11. Find the topic that appears most frequently.
       most common topic = df['topic'].mode()[0]
  10
       print('11. Most common topic:', most common topic)
 PROBLEMS
           OUTPUT
                    DEBUG CONSOLE
                                   TERMINAL
                                             PORTS
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/Or
 .py"
11. Most common topic: indUnk
```

```
🐡 prob1 copy 4.py 🗦 ...
       import pandas as pd
       import numpy as np
      # Load the dataset
       df = pd.read_csv('blogtext.csv')
       # 4. Number of bloggers for each gender
       gender_counts = df['gender'].value_counts()
       print(gender_counts)
 PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
$ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/Desktop/rajshree eds/prob1 copy 4.py"
 gender
 male
           345193
 female
           336091
 Name: count, dtype: int64
 gender
 male
           345193
           336091
 female
 Name: count, dtype: int64
```

```
👘 prob1 copy 9.py 🗦 ...
   2 ∨ import pandas as pd
       import numpy as np
       # Load the dataset
       df = pd.read csv('blogtext.csv')
       # 9. Proportion of male to female bloggers
       gender counts = df['gender'].value counts()
  11
       male_female_ratio = gender_counts['male'] / gender_counts['female']
  12
       print(male female ratio)
 PROBLEMS
           OUTPUT
                    DEBUG CONSOLE
                                   TERMINAL
                                            PORTS
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/Desktop/rajshree ed
s/prob1 copy 9.py"
 1.027081951019218
```

```
💡 prob1 copy 5.py > ...
       import pandas as pd
       import numpy as np
       # Load the dataset
       df = pd.read_csv('blogtext.csv')
       # 5. Find the number of blog posts written by male bloggers.
       male_posts = (df['gender'] == 'male').sum()
       print('Number of male posts:', male_posts)
  10
 PROBLEMS
           OUTPUT
                   DEBUG CONSOLE
                                  TERMINAL
                                            PORTS
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/Desktop/rajshree en
s/prob1 copy 6.py"
 200.78674238643504
```

```
import pandas as pd
       import numpy as np
  Click to add a breakpoint
       # Load the dataset
       df = pd.read_csv('blogtext.csv')
       # 6. Average number of words per blog post
       df['word_count'] = df['text'].apply(lambda x: len(str(x).split()))
       average_words = df['word_count'].mean()
       print(average words)
 PROBLEMS
           OUTPUT
                    DEBUG CONSOLE
                                   TERMINAL
                                             PORTS
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/Desktop/rajshree ed
s/prob1 copy 6.py"
 200.78674238643504
```

```
🥏 prob1 copy 13.py 🗦 ...
        import pandas as pd
        import numpy as np
        # Load the dataset
        df = pd.read_csv('blogtext.csv')
        # 13. Age group with the most bloggers
        df['age_group'] = pd.cut(df['age'], bins=[0,19,29,39,49,59,100], labels=['Teens','Twenties','Thirties','Forties','Fifties','Sixties+'])
        most_common_age_group = df['age_group'].value_counts().idxmax()
   11
        print(most common age group)
  PROBLEMS
            OUTPUT
                    DEBUG CONSOLE
                                   TERMINAL
                                             PORTS
  yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
$ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/Desktop/rajshree eds/prob1 copy 13.py"
♦ Twenties
```

```
🥏 prob1 copy 11.py 🗦 ...
       import pandas as pd
       import numpy as np
       # Load the dataset
       df = pd.read csv('blogtext.csv')
       # 11. Top 5 most common astrological signs
       top5_signs = df['sign'].value_counts().head(5)
       print(top5 signs)
 PROBLEMS
           OUTPUT
                    DEBUG CONSOLE
                                  TERMINAL
                                            PORTS
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/Desktop/rajshree ed
 s/prob1 copy 11.py"
sign
 Cancer
           65048
 Aries
           64979
 Taurus
           62561
 Libra
           62363
 Virgo
           60399
 Name: count, dtype: int64
```

```
prob1 copy 19.py > ...
       import pandas as pd
       import numpy as np
       # Load the dataset
       df = pd.read csv('blogtext.csv')
       # 19. Average blog post Rength by astrological sign
       df['word_count'] = df['text'].apply(lambda x: len(str(x).split()))
   9
       avg length by sign = df.groupby('sign')['word count'].mean()
  11
       print(avg length by sign)
 PROBLEMS
           OUTPUT
                    DEBUG CONSOLE
                                   TERMINAL
                                             PORTS
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDr
 .py"
sign
 Aquarius
                212.180993
 Aries
                186.006464
 Cancer
                207.809418
 Capricorn
                203.671307
 Gemini
                207.412792
                211.659103
 Leo
 Libra
                198.088658
 Pisces
                194.053984
 Sagittarius
                201.102186
 Scorpio
                190.356519
 Taurus
                195.613561
                205.791189
 Virgo
 Name: word count, dtype: float64
```

```
prob1 copy 7.py > ...
       import pandas as pd
        import numpy as np
        # Load the dataset
       df = pd.read_csv('blogtext.csv')
        # 7. Blogger with maximum blog posts
       max_posts_blogger = df['id'].value_counts().idxmax()
        print(max_posts_blogger)
 PROBLEMS
           OUTPUT
                    DEBUG CONSOLE
                                  TERMINAL
                                            PORTS
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/Desktop/rajshree e
s/prob1 copy 7.py"
 449628
```

```
👘 prob1 copy 3.py 🗦 ...
        import pandas as pd
       import numpy as np
       # Load the dataset
       df = pd.read_csv('blogtext.csv')
       # 3. Average age of bloggers
       average_age = df['age'].mean()
       print(average_age)
  11
 PROBLEMS
                    DEBUG CONSOLE
                                  TERMINAL
                                            PORTS
           OUTPUT
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/OneDrive/Desktop/rajshree eds/prob1 copy 3.py"
23.932326313255558
```

```
🥏 prob1 copy 10.py 🗦 ...
       # Load the dataset
       df = pd.read_csv('blogtext.csv')
       # 7. Find the most common astrological sign among the bloggers.
       most common sign = df['sign'].mode()[0]
        print('7. Most common sign:', most_common_sign)
  10
 PROBLEMS
           OUTPUT
                    DEBUG CONSOLE
                                   TERMINAL
                                             PORTS
 yrugw@Deadlux MINGW64 ~/OneDrive/Desktop/rajshree eds
 $ C:/Users/yrugw/AppData/Local/Programs/Python/Python39/python.exe "c:/Users/yrugw/Onel
 .py"
7. Most common sign: Cancer
```