```
In [9]: import pandas as pd
         data = {'Name': ['Alice', 'Yoshva', 'Charlie'], 'Age': [24, 25, 26],'City': [']
         df = pd.DataFrame(data)
         print(df)
                Name
                      Age
                                 City
         0
               Alice
                       24
                               Trichy
              Yoshva
                       25
                           Kumbakonam
         1
         2
            Charlie
                       26
                              Madurai
In [10]: import pandas as pd
         df=pd.read csv('sample.csv')
         print(df.head())
                                                                     Email
                      Name
                             Age
                                           City
         0
                  John Doe
                              29
                                       New York
                                                       john.doe@email.com
         1
                Jane Smith
                              34
                                    Los Angeles
                                                     jane.smith@email.com
         2
             Mark Johnson
                              45
                                                   mark.johnson@email.com
                                        Chicago
                              22
                                                    emily.davis@email.com
         3
               Emily Davis
                                        Houston
            Michael Brown
                              38
                                        Phoenix
                                                  michael.brown@email.com
         import pandas as pd
In [12]:
         df=pd.read_csv('sample.csv')
         print(df.tail())
                                                                          Email
                        Name
                               Age
                                              City
         5
                Sarah Wilson
                                26
                                     Philadelphia
                                                        sarah.wilson@email.com
                 David Moore
                                       San Antonio
                                                         david.moore@email.com
         6
                                41
         7
               Sophia Taylor
                                30
                                         San Diego
                                                       sophia.taylor@email.com
         8
              James Anderson
                                50
                                            Dallas
                                                      james.anderson@email.com
            Isabella Thomas
                                                     isabella.thomas@email.com
                                28
                                            Austin
 In [5]: import pandas as pd
         df = pd.DataFrame({'A': [1, 2, None, 4], 'B': [None, 2, 3, 4]})
         df cleaned = df.dropna()
         print(df_cleaned)
               Α
                    В
            2.0
                 2.0
         1
            4.0 4.0
 In [7]: import pandas as pd
         df=pd.DataFrame({'A':[1,2,3,4],'B':[5,6,7,8]})
         filterd_data=df[df['A']>2]
         print(filterd data)
               В
             Α
         2
            3
               7
            4
               8
```

```
In [9]: import pandas as pd
         df=pd.DataFrame({'A':['Foo','Boo','Foo','Boo'],'B':[1,2,3,4]})
         grouped=df.groupby('A').sum()
         print(grouped)
              В
         Α
         Boo
              6
         Foo
              4
In [11]: import pandas as pd
         df1=pd.DataFrame({'A':['Foo','Bat'],'B':[1,2]})
         df2=pd.DataFrame({'A':['Foo', 'Bat'], 'C':[3,4]})
         merged_df=pd.merge(df1,df2,on='A')
         print(merged_df)
                 в с
              Α
            Foo
                1 3
         1 Bat 2 4
In [ ]:
```