In [4]: import pandas as pd

```
# Creating the DataFrame
         data = {
             'Employee': ['John', 'Alice', 'Bob', 'Emma'],
             'Department': ['IT', 'HR', 'Finance', 'IT'],
             'Salary': [60000, 55000, 70000, 72000],
             'Age': [30, 28, 35, 32]
         }
         df = pd.DataFrame(data)
         # 1. Display the first two rows of the DataFrame
         print("First two rows of the DataFrame:")
         print(df.head(2))
         # 2. Add a new column "Experience"
         df['Experience'] = [5, 3, 7, 6]
         print("\nDataFrame after adding 'Experience' column:")
         print(df)
         # 3. Find the average salary of all employees
         average_salary = df['Salary'].mean()
         print(f"\nAverage Salary: {average_salary}")
        First two rows of the DataFrame:
          Employee Department Salary Age
        0
              John
                          ΙT
                               60000
                                        30
             Alice
                          HR 55000
        1
                                        28
        DataFrame after adding 'Experience' column:
          Employee Department Salary Age Experience
              John
                          ΙT
                               60000
                                       30
                          HR 55000
        1
             Alice
                                       28
                                                    3
                                                    7
        2
              Bob
                   Finance
                              70000
                                       35
                               72000
                                       32
        3
              Emma
                          ΙT
                                                     6
        Average Salary: 64250.0
In [11]: import pandas as pd
         # Creating the DataFrame
         Data = {
             'Name': ['Alice', 'Bob', 'Charlie', 'David', 'Emma'],
             'Math': [85, 78, 92, 88, 76],
             'Science': [80, 89, 94, 91, 72],
             'English': [75, 82, 88, 90, 85]
         df = pd.DataFrame(Data)
         # Display students who scored more than 80 in Math
         print("Students who scored more than 80 in Math:\n", df[df['Math']>80], "\n")
         # Sort by Science scores in descending order
```

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```
print("DataFrame sorted by Science scores (descending):\n", df.sort_values('Science
 # Find the student with the highest English score
 print("Student with the highest English score:\n", df.loc[df['English'].idxmax()])
Students who scored more than 80 in Math:
      Name Math Science English
0
    Alice
              85
                       80
                                75
  Charlie
              92
                       94
                                88
                                90
3
    David
              88
                       91
DataFrame sorted by Science scores (descending):
      Name Math Science English
2 Charlie
              92
                       94
                                88
    David
                       91
                                90
3
              88
1
       Bob
              78
                       89
                                82
                                75
0
    Alice
              85
                       80
4
     Emma
             76
                       72
                                85
Student with the highest English score:
            David
Math
              88
Science
              91
English
              90
Name: 3, dtype: object
```

In [ ]: