**Step 1: DataFrame Creation**

**Create a DataFrame with the following columns: "Brand," "Model," and "Year."**

* **Three initial rows should be added to the DataFrame.**

**Step 2: Adding Additional Columns**

**Add three more columns to the DataFrame: "km," "price," and "seats."**

* **Populate these new columns with values for three cars.**

**Step 3: Column Renaming**

**Change the column name "seats" to "car wheels."**

* **Delete all the values in the "seats" column.**
* **Add new values to the "car wheels" column using DataFrame methods (provide two examples).**

**Step 4: Data Modification**

**Perform the following modifications:**

* **Change the model of the car in the second row to a different model.**
* **Change the brand name of the car in the third row to a different brand.**
* **Change the kilometers of the car in the fifth row to a different value.**
* **Change the year of the car in the first row to a different year.**

**Exercise 2**

**Step 1: Creating a DataFrame**

**Firstly, create a shopping DataFrame with the columns "Product," "Price," and "Rating." It should contain at least 5 products.**

**Step 2: High-rated Products**

**Filter the products with a "Rating" column greater than 4.0 and create a new DataFrame containing these products.**

**Step 3: Affordable Products**

**Filter the products with a "Price" column less than 50 units and create a new DataFrame containing these products.**

**Step 4: Expensive and High-rated Products**

**Filter the products with a "Price" column greater than 100 units and a "Rating" column greater than 4.5. Create a new DataFrame containing these products.**

**Step 5: Filtering and Sorting**

**Select the products with a "Price" column greater than 30 units and a "Rating" column greater than 3.5. Sort these products in descending order based on the "Rating" column and create a new DataFrame.**

**Exercise 3**

**Step 1: Creating a DataFrame**

**Create a DataFrame named "StudentGrades" with the following columns: "StudentID," "Name," "MathGrade," "EnglishGrade," and "ScienceGrade." Include at least 8 student records with random grades.**

**Step 2: Top Performers**

**Filter the students who have an average grade (computed as the mean of MathGrade, EnglishGrade, and ScienceGrade) above 85. Create a new DataFrame with these high-performing students.**

**Step 3: Struggling Students**

**Identify students who have a grade below 60 in at least one subject. Create a new DataFrame with records of these struggling students.**

**Step 4: Honor Roll Eligibility**

**Filter students who have a grade of 90 or above in both Math and Science. Create a new DataFrame containing these potential honor roll students.**

**Step 5: Subject-wise Excellence**

**Identify students who have scored the highest in each subject. Create three separate DataFrames, each showcasing the top performer in Math, English, and Science.**