1. You are developing a student management system for a school. Each student's information is stored in a dictionary with keys such as name, age, grade, and subjects. Your task is to create a program that allows the user to perform the following operations:

   - Update a student's information (e.g., change grade or add a subject).

   - Remove a student from the system.

   - Search for a student by name or age.

   - Display the list of all students along with their information.

2. You're tasked with analyzing the sales data of an online store. Each sale is represented as a tuple containing the product name, price, quantity sold, and date of sale. Your program should perform the following operations:

   - Calculate the total sales revenue.

   - Determine the best-selling product.

   - Display a list of unique products sold.

   - Find the average price of products sold.

3. Write a Python program that:
   1. Create a list book_info containing dictionaries with book information: title, author, publication_year, and ratings (a list of three ratings).
   2. Extract and print the titles of books published after 2010.
   3. Add a new book to the list. 4. Insert multiple books at specific positions.
   5. Print the information of books with ratings above a certain threshold.
   6. Find the average rating of books published in a specific year.

4. Write a Python program that:
   1. Creates a nested dictionary phone_book with the following structure:
   Outer dictionary keys: City names
   Inner dictionary keys: Names
   Inner dictionary values: Phone numbers and addresses

2 .Adds a new contact to the phone book.

3. Updates the phone number of an existing contact.

4. Deletes a contact from the phone book.

5. Searches for a contact by name.

6 . Prints the phone book for a specific city.

5. Write a Python program that:

1. Creates a dictionary employee_data with employee information.

2. Uses keys() to print all employee IDs.

3. Uses values() to print all employee details.

4. Uses items() to print all employee IDs and details.

5. Uses get() to retrieve an employee's department.

6. Uses update() to update an employee's salary.

7. Uses pop() to remove an employee from the database.

8. Uses clear() to clear the entire database.