Homework Assignment: Working with Files and File Handling

Instructions:
1. Complete the following tasks using Python to practice working with files and file handling.
2. Create a Python file named "file_handling_homework.py" to write your solutions.
3. Add comments to explain your code and provide any necessary explanations.
4. Test your code with different file scenarios and ensure the expected outputs are correct.
5. Submit the "file_handling_homework.py" file once you have completed the tasks.

Tasks:

1. Task 1: Reading and Displaying File Contents
   a. Write a program that takes a file name as user input.
   b. Open the file in read mode and read its contents.
   c. Display the contents of the file on the console.

2. Task 2: Writing User Input to a File
   a. Write a program that prompts the user to enter a sentence.
   b. Open a file named "output.txt" in write mode.
   c. Write the user's input to the file.
   d. Close the file and display a message confirming the write operation.

3. Task 3: Appending to a File
   a. Write a program that takes user input for their name and email.
   b. Open a file named "contacts.txt" in append mode.
   c. Write the user's name and email as a new line in the file.
   d. Close the file and display a message confirming the append operation.

4. Task 4: CSV Data Writing
   a. Create a list of dictionaries, with each dictionary representing a person's details (e.g., name, age, email).
   b. Open a file named "people.csv" in write mode.
   c. Write the contents of the list to the CSV file, with each person's details in a separate row.
   d. Ensure the CSV file has appropriate column headers.
   e. Close the file and display a message confirming the write operation.

Note: Remember to handle exceptions appropriately, close files after use, and provide meaningful messages to the user for each task.

Submission:
Please submit the "file_handling_homework.py" file with your completed solutions.

Good luck!