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DSA LAB MID

CS231237

Q1)

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import java.io.*;

import java.util.Scanner;

public class SimpleNotepad {

    private static StringBuilder text = new StringBuilder();

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        boolean isRunning = true;

        System.out.println("Welcome to Simple Notepad!");

        System.out.println("Available Commands:");

        System.out.println("- Type text to add it to the notepad.");

        System.out.println("- Type 'SAVE' to save your work.");

        System.out.println("- Type 'LOAD' to retrieve saved content.");

        System.out.println("- Type 'EXIT' to quit the program.");

        while (isRunning) {

            System.out.print("\nEnter text or command: ");

            String input = scanner.nextLine();

            if (input.equalsIgnoreCase("SAVE")) {

                saveToFile();

            } else if (input.equalsIgnoreCase("LOAD")) {

                loadFromFile();

            } else if (input.equalsIgnoreCase("EXIT")) {

                isRunning = false; // End the loop
            }
        }
    }
}
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        System.out.println("Exiting... Thank you for using Simple Notepad!");
    } else {
        text.append(input).append("\n"); // Add the user's text to the notepad
        System.out.println("Text added.");
    }
}

scanner.close();
}

private static void saveToFile() {
    try (FileWriter writer = new FileWriter("notepad.txt")) {
        writer.write(text.toString());

        System.out.println("Your notepad has been saved to 'notepad.txt'.");
    } catch (IOException e) {
        System.out.println("Error while saving: " + e.getMessage());
    }
}

private static void loadFromFile() {
    try (BufferedReader reader = new BufferedReader(new FileReader("notepad.txt"))) {
        text.setLength(0);

        String line;
        while ((line = reader.readLine()) != null) {
            text.append(line).append("\n");
        }

        System.out.println("Content loaded successfully:");
        System.out.println(text);
    } catch (FileNotFoundException e) {
        System.out.println("No file found to load. Please save your work first.");
    }
}

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    } catch (IOException e) {  
        System.out.println("Error while loading: " + e.getMessage());  
    }  
}  
}
```