import java.io.BufferedReader;

import java.io.BufferedWriter;

import java.io.File;

import java.io.FileReader;

import java.io.FileWriter;

import java.io.IOException;

import java.util.Scanner;

public class Demo{

private static final Scanner scanner = new Scanner(System.in);

public static void main(String[] args) {

showMenu();

}

private static void showMenu() {

int choice;

do {

System.out.println("Menu:");

System.out.println("1. Read file");

System.out.println("2. Write to file");

System.out.println("3. Append to file");

System.out.println("4. Exit");

System.out.print("Enter your choice: ");

choice = scanner.nextInt(); scanner.nextLine(); // Consume newline

switch (choice) {

case 1:

readFile();

break; case 2:

writeFile();

break; case 3:

appendToFile();

break; case 4:

System.out.println("Exiting...");

break; default:

System.out.println("Invalid choice. Please try again");

}

System.out.println();

} while (choice != 4);

}

private static void readFile() { System.out.print("Enter the file name to read: "); String fileName = scanner.nextLine();

try (BufferedReader reader = new BufferedReader(new FileReader(fileName))) {

String line;

System.out.println("File contents:");

while ((line = reader.readLine()) != null) { System.out.println(line);

}

} catch (IOException e) {

System.out.println("An error occurred while reading the file: " + e.getMessage());

}

}

private static void writeFile() {

String fileName = generateFileName(); System.out.println("File name: " + fileName);

try (BufferedWriter writer = new BufferedWriter(new FileWriter(fileName))) {

System.out.println("Enter the text to write to the file");

String line;

while (!(line = scanner.nextLine()).equals(".")) { writer.write(line);

writer.newLine();

}

System.out.println("File written successfully.");

} catch (IOException e) {

System.out.println("An error occurred while writing the file: " + e.getMessage());

}

}

private static void appendToFile() { String fileName = generateFileName();

System.out.println("File name: " + fileName);

try (BufferedWriter writer = new BufferedWriter(new FileWriter(fileName, true))) {

System.out.println("Enter the text to append to the file (Enter '.' on a new line to finish):");

String line;

while (!(line = scanner.nextLine()).equals(".")) { writer.write(line);

writer.newLine();

}

System.out.println("File appended successfully.");

} catch (IOException e) {

System.out.println("An error occurred while appending to the file: " + e.getMessage());

}

}

private static String generateFileName() { String baseName = "file";

String extension = ".txt";

int count = 1;

String fileName = baseName + count + extension;

while (new File(fileName).exists()) { count++;

fileName = baseName + count + extension;

}

return fileName;

}

}