

Introduction:

The File Read, Write, and Append program is a Java application that allows users to perform basic file operations on a specified file. The program provides functionality to write content to a file, read the content from the file, and append additional content to the existing file. It incorporates object-oriented programming (OOP) concepts to encapsulate file operations within a class, making the code modular and reusable.

Features:

1. **Write to a file:** Users can provide content that needs to be written to a file. The program utilizes the `FileWriter` class to write the content to the specified file.
2. **Read from a file:** The program reads the content from the specified file using the `FileReader` class. The content is displayed on the console for user visibility.
3. **Append to a file:** Users can enter additional content that needs to be appended to the existing file. The `FileWriter` class with the append flag is used to append the content to the file without overwriting the existing content.
4. **User input:** The program prompts the user to enter the file name, content to write, and content to append. It utilizes the `Scanner` class to read user input from the console.
5. **Encapsulation and Reusability:** The program employs object-oriented programming principles by encapsulating file operations within a class called `FileReadWriteAppendExample`. This class contains methods to write, read, and append to a file, making the code modular and reusable.
6. **Error Handling:** The program includes error handling to handle exceptions that may occur during file operations. In case of any errors, appropriate error messages are displayed on the console along with the stack trace for debugging purposes.

Usage:

1. The program can be executed in any Java development environment such as Eclipse or IntelliJ.
2. Users are prompted to enter the file name, content to write, and content to append.
3. The program performs the specified file operations and displays success or error messages accordingly.
4. The final file content is displayed on the console.