

Task 3: New IO (NIO)

Use NIO Channels and Buffers to read content from a file and write to another file.

ANS:

```
package com.Day25;
import java.io.IOException;
import java.nio.ByteBuffer;
import java.nio.channels.FileChannel;
import java.nio.file.Path;
import java.nio.file.Paths;
import java.nio.file.StandardOpenOption;

public class ReadWriteWithNIO {
    public static void main(String[] args) {
        String inputFile = "input.txt";
        String outputFile = "output.txt";

        // Paths to input and output files
        Path inputPath = Paths.get(inputFile);
        Path outputPath = Paths.get(outputFile);

        // Create a buffer with a fixed size
        ByteBuffer buffer = ByteBuffer.allocate(1024);

        // Read content from input file and write to output file
        try (FileChannel inputChannel = FileChannel.open(inputPath,
StandardOpenOption.READ);
            FileChannel outputChannel = FileChannel.open(outputPath,
StandardOpenOption.CREATE, StandardOpenOption.WRITE)) {

            // Read the data from input file to buffer
            while (inputChannel.read(buffer) > 0) {
                // Flip the buffer for writing
                buffer.flip();

                // Write the data from buffer to output file
                outputChannel.write(buffer);

                // Clear the buffer for the next read
                buffer.clear();
            }

            System.out.println("File content copied from " + inputFile + " to " + outputFile);
        } catch (IOException e) {
            e.printStackTrace();
        }
    }
}
```

