

DAY 25:

ASSIGNMENT 3:

Task 3: New IO (NIO)

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

ANSWER:

```
import java.io.IOException;
import java.nio.ByteBuffer;
import java.nio.channels.FileChannel;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;
import java.nio.file.StandardOpenOption;

public class NIO {

    public static void main(String[] args) {

        Path inputPath = Paths.get("input.txt");
        Path outputPath = Paths.get("output.txt");

        try {

            Files.writeString(inputPath, "Hello, this is a test content.\nThis is the second line.\nAnd this is the third line.");

        } catch (IOException e) {

            e.printStackTrace();

        }

        try (FileChannel inputFileChannel = FileChannel.open(inputPath, StandardOpenOption.READ);
            FileChannel outputFileChannel = FileChannel.open(outputPath, StandardOpenOption.WRITE,
StandardOpenOption.CREATE)) {

            ByteBuffer buffer = ByteBuffer.allocate(1024);

            while (inputFileChannel.read(buffer) > 0) {

                buffer.flip(); // Prepare the buffer for reading

                outputFileChannel.write(buffer);

                buffer.clear(); // Prepare the buffer for writing
```

```
}
```

```
System.out.println("Content has been copied from " + inputPath + " to " + outputPath);
```

```
} catch (IOException e) {
```

```
    e.printStackTrace();
```

```
}
```

```
}
```

```
}
```