

Hex Class

Test: ChatGPT2HexTest

```
[INFO] -----
[ERROR] COMPILATION ERROR :
[INFO] -----
[ERROR] /home/fernando/IdeaProjects/testes_llms/src/test/java/experimento/chatgpt/hex/ChatGPT2HexTest.java:[104,44] incompatible types: byte[] cannot be converted to char[]
[INFO] 1 error
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 1.118 s
[INFO] Finished at: 2025-04-06T12:23:01-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-compiler-plugin:3.8.1:testCompile (default-testCompile) on project testes_llms: Compilation failure
[ERROR] /home/fernando/IdeaProjects/testes_llms/src/test/java/experimento/chatgpt/hex/ChatGPT2HexTest.java:[104,44] incompatible types: byte[] cannot be converted to char[]
[ERROR]
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

Test: ChatGPT3HexTest

```
[INFO] Results:
[INFO]
[ERROR] Errors:
[ERROR] ChatGPT3HexTest.testEncodeObjectWithByteArray:122 ClassCast class [B cannot be cast to class [C ([B and [C are in module java.base of loader 'bootstrap')
[INFO]
[ERROR] Tests run: 19, Failures: 0, Errors: 1, Skipped: 0
[INFO]
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 1.824 s
[INFO] Finished at: 2025-04-06T13:06:20-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-surefire-plugin:3.0.0-M7:test (default-test) on project testes_llms:
[ERROR]
[ERROR] Please refer to /home/fernando/IdeaProjects/testes_llms/target/surefire-reports for the individual test results.
[ERROR] Please refer to dump files (if any exist) [date].dump, [date]-jvmRun[N].dump and [date].dumpstream.
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

Test: ChatGPT5HexTest

```
[INFO] Results:
[INFO]
[ERROR] Errors:
[ERROR] ChatGPT5HexTest.testEncodeObjectWithByteArray:113 ClassCast class [B cannot be cast to class [C ([B and [C are in module java.base of loader 'bootstrap')
[INFO]
[ERROR] Tests run: 19, Failures: 0, Errors: 1, Skipped: 0
[INFO]
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 1.829 s
[INFO] Finished at: 2025-04-06T11:59:47-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-surefire-plugin:3.0.0-M7:test (default-test) on project testes_llms:
[ERROR]
[ERROR] Please refer to /home/fernando/IdeaProjects/testes_llms/target/surefire-reports for the individual test results.
[ERROR] Please refer to dump files (if any exist) [date].dump, [date]-jvmRun[N].dump and [date].dumpstream.
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

BinaryCodec Class

Test: ChatGPT1BinaryCodecTest

```
[INFO] -----
[ERROR] COMPILATION ERROR :
[INFO] -----
[ERROR] /home/fernando/IdeaProjects/testes_llms/src/test/java/experimento/chatgpt/binarycodec/ChatGPT1BinaryCodecTest.java:[24,46] incompatible types: byte[] cannot be converted to char[]
[INFO] 1 error
[INFO] -----
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 1.097 s
[INFO] Finished at: 2025-04-09T11:12:08-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-compiler-plugin:3.8.1:testCompile (default-testCompile) on project testes_llms: Compilation failure
[ERROR] /home/fernando/IdeaProjects/testes_llms/src/test/java/experimento/chatgpt/binarycodec/ChatGPT1BinaryCodecTest.java:[24,46] incompatible types: byte[] cannot be converted to char[]
[ERROR]
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

Test: ChatGPT2BinaryCodecTest

```
[INFO] -----
[ERROR] COMPILATION ERROR :
[INFO] -----
[ERROR] /home/fernando/IdeaProjects/testes_llms/src/test/java/experimento/chatgpt/binarycodec/ChatGPT2BinaryCodecTest.java:[24,58] incompatible types: byte[] cannot be converted to char[]
[INFO] 1 error
[INFO] -----
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 1.100 s
[INFO] Finished at: 2025-04-09T12:15:11-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-compiler-plugin:3.8.1:testCompile (default-testCompile) on project testes_llms: Compilation failure
[ERROR] /home/fernando/IdeaProjects/testes_llms/src/test/java/experimento/chatgpt/binarycodec/ChatGPT2BinaryCodecTest.java:[24,58] incompatible types: byte[] cannot be converted to char[]
[ERROR]
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

Test: ChatGPT3BinaryCodecTest

```
[INFO] -----
[ERROR] COMPILATION ERROR :
[INFO] -----
[ERROR] /home/fernando/IdeaProjects/testes_llms/src/test/java/experimento/chatgpt/binarycodec/ChatGPT3BinaryCodecTest.java:[37,58] incompatible types: byte[] cannot be converted to char[]
[INFO] 1 error
[INFO] -----
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 1.082 s
[INFO] Finished at: 2025-04-09T12:24:29-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-compiler-plugin:3.8.1:testCompile (default-testCompile) on project testes_llms: Compilation failure
[ERROR] /home/fernando/IdeaProjects/testes_llms/src/test/java/experimento/chatgpt/binarycodec/ChatGPT3BinaryCodecTest.java:[37,58] incompatible types: byte[] cannot be converted to char[]
[ERROR]
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

Test: ChatGPT4BinaryCodecTest

```
[INFO] -----
[ERROR] COMPILATION ERROR :
[INFO] -----
[ERROR] /home/fernando/IdeaProjects/testes_llms/src/test/java/experimento/chatgpt/binarycodec/ChatGPT4BinaryCodecTest.java:[28,58] incompatible types: byte[] cannot be converted to char[]
[INFO] 1 error
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 1.089 s
[INFO] Finished at: 2025-04-09T12:33:23-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-compiler-plugin:3.8.1:testCompile (default-testCompile) on project testes_llms: Compilation failure
[ERROR] /home/fernando/IdeaProjects/testes_llms/src/test/java/experimento/chatgpt/binarycodec/ChatGPT4BinaryCodecTest.java:[28,58] incompatible types: byte[] cannot be converted to char[]
[ERROR]
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

Test: ChatGPT5BinaryCodecTest

```
[INFO] -----
[ERROR] COMPILATION ERROR :
[INFO] -----
[ERROR] /home/fernando/IdeaProjects/testes_llms/src/test/java/experimento/chatgpt/binarycodec/ChatGPT5BinaryCodecTest.java:[133,61] incompatible types: byte[] cannot be converted to char[]
[INFO] 1 error
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 1.046 s
[INFO] Finished at: 2025-04-09T12:39:09-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-compiler-plugin:3.8.1:testCompile (default-testCompile) on project testes_llms: Compilation failure
[ERROR] /home/fernando/IdeaProjects/testes_llms/src/test/java/experimento/chatgpt/binarycodec/ChatGPT5BinaryCodecTest.java:[133,61] incompatible types: byte[] cannot be converted to char[]
[ERROR]
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

CharRange Class

Test: ChatGPT1CharRangeTest

```
[INFO]
[INFO] Results:
[INFO]
[ERROR] Failures:
[ERROR]   ChatGPT1CharRangeTest.testContainsRange_NegativeToNegative:65 expected: <true> but was: <false>
[INFO]
[ERROR] Tests run: 22, Failures: 1, Errors: 0, Skipped: 0
[INFO]
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 2.356 s
[INFO] Finished at: 2025-04-10T12:17:47-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-surefire-plugin:3.0.0-M7:test (default-test) on project testes_llms: There are test failures!
[ERROR]
[ERROR] Please refer to /home/fernando/IdeaProjects/testes_llms/target/surefire-reports for the individual test results.
[ERROR] Please refer to dump files (if any exist) [date].dump, [date]-jvmRun[N].dump and [date].dumpstream.
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

Test: ChatGPT2CharRangeTest

```
[INFO]
[INFO] Results:
[INFO]
[ERROR] Failures:
[ERROR]   ChatGPT2CharRangeTest.testContains_negatedContainingNegated:104 expected: <false> but was: <true>
[INFO]
[ERROR] Tests run: 21, Failures: 1, Errors: 0, Skipped: 0
[INFO]
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 1.949 s
[INFO] Finished at: 2025-04-10T12:24:53-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-surefire-plugin:3.0.0-M7:test (default-test) on project testes_llms: There are test failures.
[ERROR]
[ERROR] Please refer to /home/fernando/IdeaProjects/testes\_llms/target/surefire-reports for the individual test results.
[ERROR] Please refer to dump files \(if any exist\) \[date\].dump, \[date\]-jvmRun\[N\].dump and \[date\].dumpstream.
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

Test: ChatGPT3CharRangeTest

```
[INFO]
[INFO] Results:
[INFO]
[ERROR] Failures:
[ERROR]   ChatGPT3CharRangeTest.testContains_negatedContainsNegated:110 expected: <true> but was: <false>
[ERROR]   ChatGPT3CharRangeTest.testIterator_negatedRangeAvoidsGap:136 expected: <a> but was: <>
[INFO]
[ERROR] Tests run: 21, Failures: 2, Errors: 0, Skipped: 0
[INFO]
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 1.951 s
[INFO] Finished at: 2025-04-10T12:28:56-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-surefire-plugin:3.0.0-M7:test (default-test) on project testes_llms: There are test failures.
[ERROR]
[ERROR] Please refer to /home/fernando/IdeaProjects/testes\_llms/target/surefire-reports for the individual test results.
[ERROR] Please refer to dump files \(if any exist\) \[date\].dump, \[date\]-jvmRun\[N\].dump and \[date\].dumpstream.
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

Test: ChatGPT4CharRangeTest

```
[INFO]
[INFO] Results:
[INFO]
[ERROR] Failures:
[ERROR]   ChatGPT4CharRangeTest.testNegatedContainsNegated:98 expected: <false> but was: <true>
[INFO]
[ERROR] Tests run: 22, Failures: 1, Errors: 0, Skipped: 0
[INFO]
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 1.997 s
[INFO] Finished at: 2025-04-10T12:30:27-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-surefire-plugin:3.0.0-M7:test (default-test) on project testes_llms: There are test failures.
[ERROR]
[ERROR] Please refer to /home/fernando/IdeaProjects/testes\_llms/target/surefire-reports for the individual test results.
[ERROR] Please refer to dump files \(if any exist\) \[date\].dump, \[date\]-jvmRun\[N\].dump and \[date\].dumpstream.
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

Test: ChatGPT5CharRangeTest

```
[INFO] Results:
[INFO]
[ERROR] Failures:
[ERROR]   ChatGPT5CharRangeTest.testContainsRangeNegatedInsideNegated:132 expected: <true> but was: <false>
[ERROR]   ChatGPT5CharRangeTest.testIteratorOverNegatedRange:184 expected: <a> but was: <>
[INFO]
[ERROR] Tests run: 25, Failures: 2, Errors: 0, Skipped: 0
[INFO]
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time:  1.987 s
[INFO] Finished at: 2025-04-10T12:33:35-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-surefire-plugin:3.0.0-M7:test (default-test) on project testes_llms: There are test failures.
[ERROR]
[ERROR] Please refer to /home/fernando/IdeaProjects/testes_llms/target/surefire-reports for the individual test results.
[ERROR] Please refer to dump files (if any exist) [date].dump, [date]-jvmRun[N].dump and [date].dumpstream.
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

Fraction Class

Test: ChatGPT1FractionTest

```
[INFO]
[INFO] Results:
[INFO]
[ERROR] Failures:
[ERROR]   ChatGPT1FractionTest.testNegateAndAbs:68 expected: <-3> but was: <3>
[INFO]
[ERROR] Tests run: 13, Failures: 1, Errors: 0, Skipped: 0
[INFO]
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time:  2.567 s
[INFO] Finished at: 2025-04-11T12:26:36-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-surefire-plugin:3.0.0-M7:test (default-test) on project testes_llms: There are test failures.
[ERROR]
[ERROR] Please refer to /home/fernando/IdeaProjects/testes_llms/target/surefire-reports for the individual test results.
[ERROR] Please refer to dump files (if any exist) [date].dump, [date]-jvmRun[N].dump and [date].dumpstream.
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

Test: ChatGPT3FractionTest

```
[INFO]
[INFO] Results:
[INFO]
[ERROR] Failures:
[ERROR]   ChatGPT3FractionTest.testFractionFromDoubleEpsilon:151 expected: <1> but was: <333>
[INFO]
[ERROR] Tests run: 19, Failures: 1, Errors: 0, Skipped: 0
[INFO]
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time:  2.287 s
[INFO] Finished at: 2025-04-11T12:30:02-03:00
[INFO] -----
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-surefire-plugin:3.0.0-M7:test (default-test) on project testes_llms: There are test failures.
[ERROR]
[ERROR] Please refer to /home/fernando/IdeaProjects/testes_llms/target/surefire-reports for the individual test results.
[ERROR] Please refer to dump files (if any exist) [date].dump, [date]-jvmRun[N].dump and [date].dumpstream.
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
■
```