

- How to compile the code
- 0.confirm the file is now
 - 1.Go to folder `src/`
 - 2.Run command
 - 3.After compiling, there will be a “CompilationEngine.class”, a “Analyzer.class” and a “Tokenizer.class” file in current path
- How to run the code
- TLDR:

How to compile the code

0.confirm the file is now

```
tree
```

```
(base) eamin@EamindeMacBook-Pro YimingChengProject10 % tree
.
├── ArrayTest
│   └── Main.jack
├── ExpressionlessSquare
│   ├── Main.jack
│   ├── Square.jack
│   └── SquareGame.jack
├── Square
│   ├── Main.jack
│   ├── Square.jack
│   └── SquareGame.jack
├── src
│   ├── Analyzer.java
│   ├── TextComparerer.class
│   └── TextComparerer.sh
└── test
    ├── ArrayTest
    │   ├── Main.jack
    │   ├── Main.xml
    │   └── MainT.xml
    ├── ExpressionLessSquare
    │   ├── Main.jack
    │   ├── Main.xml
    │   ├── MainT.xml
    │   ├── Square.jack
    │   ├── Square.xml
    │   ├── SquareGame.jack
    │   ├── SquareGame.xml
    │   └── SquareGameT.xml
```

```
|   └─ SquareT.xml
└─ Square
    ├── Main.jack
    ├── Main.xml
    ├── MainT.xml
    ├── Square.jack
    ├── Square.xml
    ├── SquareGame.jack
    ├── SquareGame.xml
    ├── SquareGameT.xml
    └─ SquareT.xml
```

9 directories, 31 files

1.Go to folder `src/`

```
cd path to src
```

Make sure you can see

```
ls
```

```
(base) eamin@EamindeMacBook-Pro src % ls
Analyzer.java          TextComparer.class    TextComparer.sh
```

2.Run command

```
javac Analyzer.java
```

Make sure you can see

```
(base) eamin@EamindeMacBook-Pro src % javac Analyzer.java
(base) eamin@EamindeMacBook-Pro src % tree
.
├── Analyzer.class
├── Analyzer.java
├── CompilationEngine.class
├── TextComparer.class
├── TextComparer.sh
└── Tokenizer.class

1 directory, 6 files
```

3.After compiling, there will be a “CompilationEngine.class”, a “Analyzer.class” and a “Tokenizer.class” file in current path

How to run the code

1.Command format is

a:

```
java Analyzer XXX.jack
```

Analyzer will generate

Main.xml:result of parsing the class)

MainT.xml:result of tokenizing

in the same directory of Main.jack.

b:

```
java Analyzer directory
```

Analyzer will generate

several `.xml` files according to the number of `.jack` files named by `filename.xml`(result of parsing the class) and a `filenameT.xml`(result of tokenizing) in the same directory.

compare:

```
./TextComparer.sh file1 file2
```

TLDR:

To test the whole project:

Compile

```
cd src
```

```
javac Analyzer.java
```

Run and Test `ArrayTest`

```
java Analyzer ../ArrayTest
```

```
./TextComparer.sh ../ArrayTest/Main.xml ../test/ArrayTest/Main.xml
```

```
./TextComparer.sh ../ArrayTest/MainT.xml ../test/ArrayTest/MainT.xml
```

Run and Test `ExpressionlessSquare`

```
java Analyzer ../ExpressionlessSquare
```

```
./TextComparer.sh ../ExpressionlessSquare/Main.xml ../test/ExpressionlessSquare/Main.xml
```

```
./TextComparer.sh ../ExpressionlessSquare/MainT.xml ../test/ExpressionlessSquare/MainT.xml
```

```
./TextComparer.sh ../ExpressionlessSquare/Square.xml ../test/ExpressionlessSquare/Square.xml
```

```
./TextComparer.sh ../ExpressionlessSquare/SquareT.xml ../test/ExpressionlessSquare/SquareT.xml
```

```
./TextComparer.sh ../ExpressionlessSquare/SquareGame.xml ../test/ExpressionlessSquare/SquareGame.xml
```

```
./TextComparer.sh ../ExpressionlessSquare/SquareGameT.xml ../test/ExpressionlessSquare/SquareGameT.xml
```

Run and Test Square

```
java Analyzer ../Square

../TextComparer.sh ../Square/Main.xml ../test/Square/Main.xml

../TextComparer.sh ../Square/MainT.xml ../test/Square/MainT.xml

../TextComparer.sh ../Square/Square.xml ../test/Square/Square.xml

../TextComparer.sh ../Square/SquareT.xml ../test/Square/SquareT.xml

../TextComparer.sh ../Square/SquareGame.xml ../test/Square/SquareGame.xml

../TextComparer.sh ../Square/SquareGameT.xml ../test/Square/SquareGameT.xml
```

Thanks you for reading

If anything wrong,im begging you to email eaminc0328@gmail.com first

My testing result

```
● (base) eamin@EamindeMacBook-Pro YimingChengProject10 % cd src
● (base) eamin@EamindeMacBook-Pro src % javac Analyzer.java
● (base) eamin@EamindeMacBook-Pro src % java Analyzer ../ArrayTest
File created : /Users/eamin/Desktop/data/学习资料/芝加哥大学/2025_spring/System/MPCS-52011-2-1-Winter-2025-Introduction-to-Computer-Systems-2025-Jan-10_00-25-49-069/viewer/files/Hw/YimingChengProject10/src/./ArrayTest/Main.xml
File created : /Users/eamin/Desktop/data/学习资料/芝加哥大学/2025_spring/System/MPCS-52011-2-1-Winter-2025-Introduction-to-Computer-Systems-2025-Jan-10_00-25-49-069/viewer/files/Hw/YimingChengProject10/src/./ArrayTest/MainT.xml
● (base) eamin@EamindeMacBook-Pro src % ./TextComparer.sh ../ArrayTest/Main.xml ../test/ArrayTest/Main.xml
Comparison ended successfully
● (base) eamin@EamindeMacBook-Pro src % ./TextComparer.sh ../ArrayTest/MainT.xml ../test/ArrayTest/MainT.xml
Comparison ended successfully
● (base) eamin@EamindeMacBook-Pro src % java Analyzer ../ExpressionlessSquare
File created : 在编辑器中打开文件 (Cmd + 单击) 科/芝加哥大学/2025_spring/System/MPCS-52011-2-1-Winter-2025-Introduction-to-Computer-Systems-2025-Jan-10_00-25-49-069/viewer/files/Hw/YimingChengProject10/src/./ExpressionlessSquare/Square.xml
File created : /Users/eamin/Desktop/data/学习资料/芝加哥大学/2025_spring/System/MPCS-52011-2-1-Winter-2025-Introduction-to-Computer-Systems-2025-Jan-10_00-25-49-069/viewer/files/Hw/YimingChengProject10/src/./ExpressionlessSquare/SquareT.xml
File created : /Users/eamin/Desktop/data/学习资料/芝加哥大学/2025_spring/System/MPCS-52011-2-1-Winter-2025-Introduction-to-Computer-Systems-2025-Jan-10_00-25-49-069/viewer/files/Hw/YimingChengProject10/src/./ExpressionlessSquare/SquareGame.xml
File created : /Users/eamin/Desktop/data/学习资料/芝加哥大学/2025_spring/System/MPCS-52011-2-1-Winter-2025-Introduction-to-Computer-Systems-2025-Jan-10_00-25-49-069/viewer/files/Hw/YimingChengProject10/src/./ExpressionlessSquare/SquareGameT.xml
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File created : /Users/eamin/Desktop/data/学习资料/芝加哥大学/2025_spring/System/MPCS-52011-2-1-Winter-2025-Introduction-to-Computer-Systems-2025-Jan-10_00-25-49-069/viewer/files/Hw/YimingChengProject10/src/./ExpressionlessSquare/MainT.xml
● (base) eamin@EamindeMacBook-Pro src % ./TextComparer.sh ../ExpressionlessSquare/Main.xml ../test/ExpressionlessSquare/Main.xml
Comparison ended successfully
● (base) eamin@EamindeMacBook-Pro src % ./TextComparer.sh ../ExpressionlessSquare/MainT.xml ../test/ExpressionlessSquare/MainT.xml
Comparison ended successfully
● (base) eamin@EamindeMacBook-Pro src % ./TextComparer.sh ../ExpressionlessSquare/Square.xml ../test/ExpressionlessSquare/Square.xml
Comparison ended successfully
● (base) eamin@EamindeMacBook-Pro src % ./TextComparer.sh ../ExpressionlessSquare/SquareT.xml ../test/ExpressionlessSquare/SquareT.xml
Comparison ended successfully
● (base) eamin@EamindeMacBook-Pro src % ./TextComparer.sh ../ExpressionlessSquare/SquareGame.xml ../test/ExpressionlessSquare/SquareGame.xml
Comparison ended successfully
● (base) eamin@EamindeMacBook-Pro src % ./TextComparer.sh ../ExpressionlessSquare/SquareGameT.xml ../test/ExpressionlessSquare/SquareGameT.xml
Comparison ended successfully
● (base) eamin@EamindeMacBook-Pro src % java Analyzer ../Square
File created : /Users/eamin/Desktop/data/学习资料/芝加哥大学/2025_spring/System/MPCS-52011-2-1-Winter-2025-Introduction-to-Computer-Systems-2025-Jan-10_00-25-49-069/viewer/files/Hw/YimingChengProject10/src/./Square/Square.xml
File created : /Users/eamin/Desktop/data/学习资料/芝加哥大学/2025_spring/System/MPCS-52011-2-1-Winter-2025-Introduction-to-Computer-Systems-2025-Jan-10_00-25-49-069/viewer/files/Hw/YimingChengProject10/src/./Square/SquareT.xml
File created : /Users/eamin/Desktop/data/学习资料/芝加哥大学/2025_spring/System/MPCS-52011-2-1-Winter-2025-Introduction-to-Computer-Systems-2025-Jan-10_00-25-49-069/viewer/files/Hw/YimingChengProject10/src/./Square/SquareGame.xml
File created : /Users/eamin/Desktop/data/学习资料/芝加哥大学/2025_spring/System/MPCS-52011-2-1-Winter-2025-Introduction-to-Computer-Systems-2025-Jan-10_00-25-49-069/viewer/files/Hw/YimingChengProject10/src/./Square/SquareGameT.xml
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● (base) eamin@EamindeMacBook-Pro src % ./TextComparer.sh ../Square/Main.xml ../test/Square/Main.xml
Comparison ended successfully
● (base) eamin@EamindeMacBook-Pro src % ./TextComparer.sh ../Square/MainT.xml ../test/Square/MainT.xml
Comparison ended successfully
● (base) eamin@EamindeMacBook-Pro src % ./TextComparer.sh ../Square/Square.xml ../test/Square/Square.xml
Comparison ended successfully
● (base) eamin@EamindeMacBook-Pro src % ./TextComparer.sh ../Square/SquareT.xml ../test/Square/SquareT.xml
Comparison ended successfully
● (base) eamin@EamindeMacBook-Pro src % ./TextComparer.sh ../Square/SquareGame.xml ../test/Square/SquareGame.xml
Comparison ended successfully
● (base) eamin@EamindeMacBook-Pro src % ./TextComparer.sh ../Square/SquareGameT.xml ../test/Square/SquareGameT.xml
Comparison ended successfully
○ (base) eamin@EamindeMacBook-Pro src % █
```