

# CS335: Project

## Milestone-1

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## Tools and Utilities used

### 1. Utilities

- *FLEX*: lexical Analysis
- *BISON*: syntax Analysis
- *GRAPHVIZ*: graphical analysis
- *MAKEFILE*: compilation of multiple files
- *ARGPARSE*: to implement command line arguments

### 2. Sources

- Java Language Specification, ORACLE

## How to run

1. Go to the directory milestone1/src. Run the following command to remove previous generated files and compile the required ones:

```
make clean  
make
```

**final** is the executable.

2. For the command line executions, write

```
./final -h
```

This will show you all the commands which can be given along with ./final

- **-i**: For getting the input file, as -i="FileName"
- **-o**: For obtaining the output file, as -o="FileName"

- **-h**: will show all the commands and there uses to the user
  - **-v**: will show the version of the program
  - **--verbose**: it will tell, what all has happened through the execution of **final**.
3. To run the program, use the following command, where Source File is **test.java** and the output dot file is **out.dot**

```
./final -i="test.java" -o="out.dot"
```
  4. To print the graph, use following command, where the dot file is **out.dot** and the graph will be in **graph.ps**

```
dot -Tps -o graph.ps out.dot
```

## Support Provided

1. All the basic ones mentioned, like class and objects, methods, variables, arrays, statements, data types, loops, modifiers etc.
2. Class Extends
3. String data type and its supports
4. Reference Type
5. Interfaces
6. Import statements