

CS335A: Milestone 1

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1 Steps to run the program

Open the 'milestone1/src' folder and type 'make'. It will show the different options which can be tried with makefile.

1. **help** to Show methods for each of the Makefile recipes
2. **build** to generate files for the executable. It will run the following commands-

```
flex lexer.l
bison -d -t parser.y
g++ lex.yy.c parser.tab.c
```

3. **run** to run the executable using input like-

```
make run input=file-path
```

'or else run with terminal input. This would run-

```
./myASTgenerator input-file-path
```

Also, output of dot file can be named optionally as using-

```
run input=file-path.java output=output-file-path.dot
```

which runs like-

```
./myASTgenerator input-file-path output-file-path
```

4. **verbose** similar to **run** in verbose mode

```
make verbose input=file-path.java output=output-file-path.dot
```

5. **clean** to clean up the generated files

```
make clean
```

2 Tools Used

flex: Used for Generating tokens from the input.

bison: Used for defining Syntax Grammar for the JAVA language.

Dot language: Used to generate the tree from the Grammatical syntax.

graphviz: Used to visualize the generated AST.

Makefile: Used to automate the working of the program for a specific input with different arguments such as -verbose,help,input,output

c++ programming language Used for the logical coding portion of the program.