# **CS335**

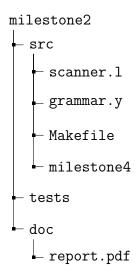
## Milestone 4

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### 1 Directory Structure

Following is the directory structure of our project.



### 2 Execution Step

Following are the steps for execution. Assume that the current location is the milestone4 directory.

```
cd src
make
./milestone4 --input=./../tests/input.java --output=output.s
```

#### 3 Functions Included

### 3.1 Basic Functionality

- Basic operators:
  - Arithmetic operators: +, -, \*, /, %
  - Preincrement, predecrement, postincrement, and postdecrement (only type-checking done)
  - Relational operators: ==, !=, <, >,  $\le$ ,  $\ge$
  - Bitwise operators: &,  $|, \land, \tilde{,} <<, >>, >>$  (only type-checking done)
  - Logical operators: &&, ||,! (only type-checking done)
  - Assignment operators: =, +=, -=, \*=, /=, &=
- Control flow via if-then, for, and while

#### 3.2 Bonus Functionality

- Included support for nested class
- Support for nested loops
- Support for global variables
- Methods and method calls, static methods only
- Support for recursion

#### 3.3 Limitations:

- local variables cant have modifiers.
- no support for lambda, annotations, class literal
- only cast to primitive is allowed
- explicit constructor invocation not supported
- no static block allowed
- class interface all are supposed to have same type

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## 4 Contribution

Adi Pratap Singh = 33.33% Naman Singla = 33.33% Rishav Bikarwar = 33.33%

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