

## Compilers Milestone 1

### Group Members

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### Description

We're using PLY Python-Lex-Yacc toolchain to implement our lexer and parser. To generate the ASTs for the test cases, run the following commands –

1. `$ cd src/`
2. The below command will run all the test cases present in the “tests/” folder and will create “\*.dot” files inside “src/AST/” folder  
  
`$ ls ../tests/*.java | xargs -n1 -I { python3 new_parser.py {`
3. To generate the corresponding PNG files using the graphviz tool, run the following command (This will take some time because the ASTs generated can be huge):  
  
`$ ls AST/*.dot | xargs -n1 -I { dot -Tpng { -o {.png`

### Features

In addition to the basic features mentioned in the “features.pdf” file, we've also implemented support for the following:

- Support for Class Inheritance
- Support for Interfaces
- TypeArguments (Using the Lexer Hack)
- Annotations
- Static Polymorphism via method overloading
- Type Casting
- Throw, Catch, Finally