

# The Lucas Lexer

Group-3

## How we made it:

- Firstly, we have figured out everything related to grammar of Lucas(i.e. Key words, Identifiers, Literals, constructs and all).
- We parallely worked on understanding Antlr, and how to write grammars to generate a Lexer in Java(using Antlr version-4).
- Last but not least, also created a Make file to make the execution easier.

# ANTLR

- ANTLR - ANother Tool for Language Recognition.
- Antlr converts the grammar into a Lexer or Parser.
- We need to provide a target language in which the Lexer should be generated.
- We had used Antlr to generate the Lexer in Java.

# ANTLR

- ANTLR uses LL(k) technique to analyse grammar.
- Parsers, lexers, and tree-parsers are accepted grammar specifications.
- Commands:('LucasLexer.g4' be the grammar file)
  - `antlr4 LucasLexer.g4`
  - `javac LucasLexer*.java`
  - `grun Lucas tokens -tokens < test.txt`

# Sample Input and Output