# Assignment 3 – Compsci 2me3 Joseph Rivard – 40022949, 2023-12-01

## **Documentation:**

Here are the replacements I made for operators and keywords. I could have done more but I already found the code pretty hard to read, so I had to stop. Good luck.

Operator	Zoomerfied	Keywords	Zoomerfied
!	salty	abstract	woke
=	stan	boolean	word
==	frfr	break	dip
+	hookup	double	broke
-	oof	class	selfie
Misc	Zoomerfied	extends	deadass
null	rip	import	drip
		private	lowkey
		long	flex
		new	lit
		public	highkey
		static	basic
		return	dm
		this	squad
		try	vibes
		catch	snitch
		void	ghost
		throw	yeet

#### On a high level how does the program work?

So first off, this program reads the *demo.javaX* file, which is encoded in "zoomer" slang. It then parses this and recompiles it as a proper java program using the <u>ANTLR</u> plugin. It will then run the program and will output all the outputs of this recompiled program. I understand this solution is pretty whack, but as far as I can tell it is the easiest way to approach the problem as Java really doesn't want people to zoomerify Java.

The mapping of the parser is in the <code>Java20Lexer.java</code>. This file contains all the new zoomer slang and their respective Java functionality. The <code>JavaLexerBase.java</code> is a supporting file. Technically if you wanted to add some new zoomer slang, you could modify the <code>Java20Lexer.java</code> with the slang, then add a case to check for that slang and translate it in <code>main</code> just like the several existing examples. However, this would be hard given that the <code>java20Lexer.java</code> file is very messy, so be careful. It is extremely easy to mess this up.

### How to run the program? Can I modify demo.javaX?

Simply run the *main* class, this is where the translation and compiling happens. You can also modify the *demo.javaX* file however you wish. As long as it is valid zoomerified Java it will successfully compile and run. Simply modify the file with new zoomer Java, save it and run the *main* class. You could also write your own java program, convert it to zoomer slang, then it will absolutely work with my program to translate it back.

### Why?

Its bussin' 💀