**CS1332 – Programming Languages**

**WEEK 1**

**Name:** Adalyn Mae T. Beo **Program/Block:** BSCS 3A

**Student ID:** 2021-01628 **Schedule:** MTH 1:00 – 3:30

**Research about LOLCODE**

**Origin and Inspiration**

LOLCODE is a playful and experimental programming language that originated from internet culture. It draws from the "lolcat" meme, which is a form of image macro that depicts cats with accompanying grammatically flawed and humorous text, also known as lolspeak or catspeak (Krukowski, 2022). The programming language itself is carefully crafted to emulate the weird and casual flavor of these memes.

**Basic Program Structure**

As discussed by Romualdo (2024), a standard LOLCODE program starts with the HAI declaration, usually preceded by a version number. This is where the program begins. To end the program, LOLCODE employs the KTHXBYE statement. These keywords serve as the opening and closing brackets of a LOLCODE script.

**Variable Declaration and Data Types**

Declaring a variable in LOLCODE is done by using the words I HAS A followed by the variable name, and then optionally using ITZ to provide an initial value (Romualdo, 2024).  
LOLCODE has several data types (Krukowski, 2022):

* YARN: Is used to represent strings, which can also have interpolated content through placeholders.
* NUMBR: For whole numbers or integers.
* NUMBAR: To represent floating-point or decimal numbers.
* TROOF: A boolean data type, with WIN being true and FAIL being false.

**Use of Operators**

Operators in LOLCODE use prefix, it features a set of mathematical and logical operators (Krukowski, 2022):

* Mathematical Operators: These are addition (SUM OF), subtraction (DIFF OF), multiplication (PRODUKT OF), division (QUOSHUNT OF), modulo (MOD OF), and comparisons to find the maximum (BIGGR OF) or minimum (SMALLR OF) of two values.
* Logical Operators: These enable equality checks, differences, negation, and joining boolean values using expressions such as BOTH SAEM, DIFFRINT, NOT, BOTH OF, and EITHER OF.

**References:**

Krukowski, I. (2022, September 16). *LOLCODE Tutorial: A programming language for cat lovers*. Lokalise Blog. https://lokalise.com/blog/lolcode-tutorial-on-programming-language-for-cat-lovers/

Romualdo, G. (2024, February 14). *Hello World in LOLCODE: A Very Peculiar Programming Language*. DEV Community. https://dev.to/gaberomualdo/hello-world-in-lolcode-a-very-peculiar-programming-language-ood

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**WEEK 2**

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**Short (5-8 sentence) team progress log: challenges faced, wins, next goals:**

I let the team decide what role they preferred for this project. After that, I started working on the lexer. I created a test file to check if the lexer could return the tokens. While testing, I found that the "AN" separator is required in expressions. I updated the lexer to include support for "AN". My next goal is to assist in checking and fixing any issues in the parser and evaluator. So far, the focus has been on making sure the lexer can return the tokens.