CSE 341 Fall 2024 – Programming Languages Assignment 3 Report

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- **INTRODUCTION**

In this assignment, I am expected to implement a syntax analyzer that accepts or reject a given program in G++.

- **METHODOLOGY**

Flex and Yacc Part

I utilized my Flex implementation from previous homework to tokenize, and I defined syntax rules while implementing semantic rules

Lisp Part

I used my lexer code from previous homework to tokenize the code. I made a program that checks if the code is syntactically correct, but it doesn't handle semantic rules. It works like a simple recursive descent parser, trying to match the correct syntax rules.

- **OUTPUTS**
  Flex and Yacc Part

```
$ g++
Interpreter Mode:
>(/ 8 4)

SYNTAX OK
Result:2
```

```
Interpreter Mode:
>(- 8 4)

SYNTAX OK
Result:4
```

Lisp Part

```
(- (/ (* (+ 4 5) 7) 8) 6)
```

```
[Running] sbcl --script "c:\Users\talha\OneDrive\Masaustu\Projeler\LispProjects\Homework3\lisp\gpp_interpreter.lisp
SYNTAX: TRUE
```