# Compilers Course Project 2022 - Ossi Lehtonen

## The Mini-PL token patterns as regular expressions

Assignment = \:\=
Operators = \+|-|*|\/|< |=|&|!
Parentheses = \(|\)
String = \”[^\”]*\”
Int = \d*
Idents_and_keywords = [A-Za-z]+(_|\d)*[A-Za-z]*

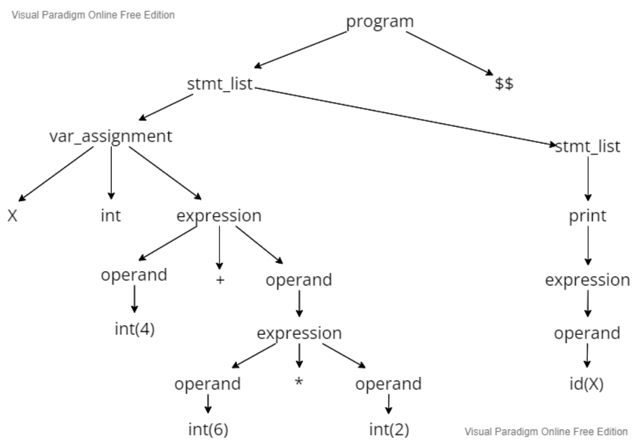
Token = String | Int | Idents_and_keywords | \; | .. | : | Assignment | Operators | parentheses

## A modified context-free grammar suitable for recursive-descent parsing (eliminating any LL(1) violations); modifications must not affect the language that is accepted.

## Specify abstract syntax trees (AST), i.e., the internal representation for Mini-PL programs; you can use UML diagrams or alternatively give a syntax-based definition of the abstract syntax.

The programs are from MiniPL.pdf

Program 1 ast:



Program 2 ast:

See picture doc/asts/ast_2.vpd.png

Program 3 ast:
See picture doc/asts/ast_3.vpd.png

**Error handling approach and solutions used in your Mini-PL implementation (in its scanner, parser, semantic analyzer, and interpreter).**

**Work Hours**

**Add work hours here when project is ready**