CSE 307/CSE 526 – Assignment # 4

Assignment problem   (marks: 25)

This assignment involves studying the PLY/Python interpreter examples available online and present your understanding in a class using a demo and PPT presentation. I have already made a student group and assigned a project for study as follows.

Table 1: Student group and project assigned

Student group	Project	Link to project source
Zion + Jeong Uk	ansic - ANSI C grammar from K&R	https://github.com/dabeaz/ply/tree/master/example/ansic
San Hae Kim + Kye Hee Park	BASIC - A small BASIC interpreter	https://github.com/dabeaz/ply/tree/master/example/BASIC
Bogdan + Rahel	GardenSnake - A simple Python-like language	https://github.com/dabeaz/ply/tree/master/example/GardenSnake
Ji Won Choi + Habibuddin	yply - Converts Unix yacc files to PLY programs	https://github.com/dabeaz/ply/tree/master/example/yply
Sujeong + Jeong Ho Shin	Parsing with PLY	https://www.researchgate.net/publication/242373397_ Assignment_2_Parsing_with_PLY_Python_Lex-Yacc
Mayukh + Salman	A simple interpreter from scratch in Python	https://www.jayconrod.com/posts/37/a-simple-interpreter-from-scratch-in-python-part-1 (full source code: https://www.jayconrod.com/code/imp-interpreter.tar.gz)

You might find the following links useful for studying PLY:

https://www.dabeaz.com/ply/

https://www.dabeaz.com/ply/PLYTalk.pdf

The scoring rubric for this assignment is as follows:

Table 2: Scoring rubric for assignment # 4

Topic	Marks	Time allotted
Demo with examples	7	3 mins
Problem statement/background/motivation	4	1 min
Lexical analysis part	4	3 mins
Parser part	4	3 mins
Question/answer	6	3 mins
Total	25	13 mins

Deadline: Kindly upload your presentations on blackboard by Monday 26 November EoD. The presentations are scheduled during lecture hours on Tuesday 27 November. The presentations will be conducted in the student group order specified in Table 1.