## VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS) IBRAHIMBAGH, HYDERABAD-31

Department of Computer Science and Engineering

Name of the Course: Compiler Construction CSE(A) VII sem

## Simulation tool Activity in CC Lab on 14 November 2022.

On 14 November, as part of the Student Activity in the classroom program, Pavan Kalyan Poduri, 1602-19-733-050 took up the program 'Generating parse trees using ANTLR tool' and explained the procedure to other students in the lab. The aim of the program was to use the ANTLR (ANother Tool for Language Recognition) tool to generate a graphical version of the parse tree using Java GUI tools. The whole program was divided into 5 ordered steps as follows:

- 1. Downloading, and saving of the required jar files from the ANTLR tool website at <a href="https://www.antlr.org">www.antlr.org</a> and in a new folder created for the program.
- 2. Creating required batch files that are used to get paths of required modules in the jar files.
- 3. Setting environment and path variables.
- 4. Creation of grammar rules according to ANTLR syntax and string to be parsed in different files.
- 5. Compilation of the created files and running them from the command prompt.

These steps were performed on one of the computer systems of the lab, connected to the lab projector which displayed the system screen on a whiteboard for other students to learn. With the help provided by one of the lab assistants, all the above steps were performed and the program was executed successfully in the lab. Each step was explained in detail and the outputs were shown for the same. The lab was conducted for 3 hours, the first hour completely for giving an introduction to the topic, explanation of all the steps, and the demonstration of an example program using the tool. The remaining time of the lab was given to the students to learn the steps involved and practice the execution of the program on their own individual systems.









