RAJAGIRI SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE

CS 431 COMPILER DESIGN LAB

LAB CYCLE

EXPERIMENTS	HOURS
1. Design and implement a lexical analyzer for given language using C and the lexical analyzer should ignore redundant spaces, tabs and new lines.	3
2.Write program to design of lexical analyzer using LEX i) Write a program to check whether the given string is valid according to the regular definition 0 (10 | 01)*. ii) Write a program to list the identifiers from a given C program.	3
3. Write program to design parser for arithmetic expressions using YACC i) Write a program to check the syntax of switch statement in C. ii) Program to recognize a valid arithmetic expression that uses operator +, – , * and /. iii) Program to recognize a valid variable which starts with a letter followed by any number of letters or digits iv) Write a program to implement arithmetic calculator.	3
4. Write program to design recursive descent parser	
5.Write a program to simulate FIRST and FOLLOW of any given grammar.	
6.Write program to implement LL (1) parser	
7.Write program to implementation of Operator precedence parsing	3
8.Write a program to perform constant propagation.	3
9. Write program to generate Intermediate Code for arithmetic expressions	3
10. Write program to design a code generator for arithmetic expressions.	3
11. Write program to find ε – closure of all states of any given NFA with ε transition.	3

Lab In-charges

1.Ms Jincy J Fernandez(S7 CS A)

2.Ms Meera M(S7 CS B)

3.Mr Hareesh M J(S7 CS C)