

# **Compilers Laboratory**

**B. Tech. 6<sup>th</sup> Semester**

**Batch: 2017**



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# Ramaiah University of Applied Sciences

Private University Established in Karnataka State by Act No. 15 of 2013

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|---------------|--|
| Faculty       | Engineering & Technology                     |
| Programme     | B. Tech. in Computer Science and Engineering |
| Course        | Compilers Laboratory                         |
| Year/Semester | 2017/6 <sup>th</sup> Semester                |
| Course Code   | CSC312A                                      |

## List of Experiments

### LEX PROGRAMS

1. Program to count the number of vowels and consonants in a given string.
2. Program to find the longest word in a given string.
3. Program to count no of:
  - a. +positive and –negative integers
  - b. +positive and –negative fractions
4. Program to count the number of characters, words, spaces, end of lines in a given input file.
5. Program to count the no of ‘scanf’ and ‘printf’ statements in a C program. Replace them with ‘readf’ and ‘writef’ statements respectively.
6. Program to perform addition, subtraction, multiplication, division and power. Note: Without Precedence.

### YACC & LEX PROGRAMS

7. Program to recognize a valid variable, which starts with a letter, followed by any number of letters or digits.
8. Program to test the syntax of a simple expression and evaluate an arithmetic expression involving operating +, -, \* and /
9. Program to recognize strings ‘aaab’, ‘abbb’, ‘ab’ and ‘a’ using grammar ( $a^n b^m$ ,  $n \geq 0$ ,  $m \geq 0$ )