

## LIST OF LAB SCHEDULE

**ACADEMIC YEAR: 2019-2020**

**DEPARTMENT : INFORMATION TECHNOLOGY**

**Date : - 14/12/2019**

**CLASS: T. E.**

**SEMESTER: II**

**SUBJECT: Software Lab V**

Lab Exp. No	Problem Statement
	Mini Project
1.	Write a recursive program to find the solution of placing n queens on chessboard so that no two queens attack each other using backtracking.
2.	Write a program to implement pass-I of two-pass assembler for symbols and literal processing ( for hypothetical instruction set from dhamdhere) considering following cases I. FORWARD REFERENCES II. DS AND DC STATEMENT III. START, EQU, LTORG, END. IV. ERROR HANDLING Symbol used but not defined, invalid instruction/register etc.
3.	Write a program to implement pass-II of two-pass assembler for output of assignment 1 (the subject teacher should provide input file for this assignment )
4	Write a program to find maximum and minimum element in an array using divide and conquer strategy and verify the time complexity.
5.	Write a program to solve optimal storage on tapes problem using greedy approach.
6.	Study assignment for macro processor. (consider all aspects of macro processor)

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7.	Write a program to implement lexical analyzer for subset of C.
8.	Write a program to implement BELLMAN-FORD algorithm using dynamic programming and verify the time complexity.
9.	Write a program to implement a recursive descent parser.
10.	Write a program to solve the travelling salesman problem and to print the path and the cost using dynamic programming.
11.	Write a program to implement calculator using LEX and YACC.
12.	Write a program for intermediate code generation using LEX and YACC for control flow statement ( either while loop or switch case)
13.	Write a program to solve the travelling salesman problem and to print the path and the cost using branch and bound.
	Mock Test ( Mid semester , End Semester)

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**Subject Coordinator**  
**Prof. K. Y. Digholkar**

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**Head of Department**  
**Dr. A. M. Bagade**