

**PUNE INSTITUTE OF COMPUTER TECHNOLOGY**

**DHANKAWADI, PUNE – 43.**

**LIST OF LAB SCHEDULE**

**ACADEMIC YEAR: 2019-2020**

**DEPARTMENT : INFORMATION TECHNOLOGY**

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

**CLASS: T. E.**

**SEMESTER: II**

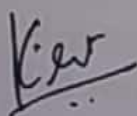
**SUBJECT: SOFTWARE LAB V**

Lab Exp. No	Problem Statement	Date of Submission
	<b>Mini Project</b>	Complete semester
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.	3 <sup>rd</sup> Week Of December
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.	1 <sup>st</sup> Week of January
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 )	2 <sup>nd</sup> Week of January
4	Write a program to find maximum and minimum element in an array using divide and conquer strategy and verify the time complexity.	3 <sup>rd</sup> Week of January
5.	Write a program to solve optimal storage on tapes problem using greedy approach.	4 <sup>th</sup> Week of January
6.	Study assignment for macro processor. (consider all aspects of macro processor)	1 <sup>st</sup> Week of February

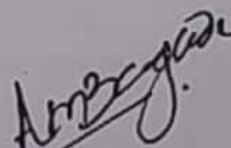
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7.	Write a program to implement lexical analyzer for subset of C.	2 <sup>nd</sup> Week of February
8.	Write a program to implement BELLMAN-FORD algorithm using dynamic programming and verify the time complexity.	4 <sup>th</sup> Week of February
9.	Write a program to implement a recursive descent parser.	1 <sup>st</sup> Week of March
10.	Write a program to solve the travelling salesman problem and to print the path and the cost using dynamic programming.	3 <sup>rd</sup> Week of March
11.	Write a program to implement calculator using LEX and YACC.	4 <sup>th</sup> Week of March
12.	Write a program for intermediate code generation using LEX and YACC for control flow statement ( either while loop or switch case)	1 <sup>st</sup> Week of April
13.	Write a program to solve the travelling salesman problem and to print the path and the cost using branch and bound.	2 <sup>nd</sup> Week of April
	Mock Test ( Mid semester , End Semester)	



Subject Coordinator  
Prof. K. Y. Digholkar



Head of Department  
Dr. A. M. Bagade