PRINCIPLES OF PROGRAMMING LANGUAGES LAB

Paper Code: ETCS-458(ELECTIVE-II)	**L**	**T/P**	**C**
Paper: Principles of Programming Languages Lab	**0**	**2**	**1**

List of Experiments:-

1. Implement all major functions of string.h in single C program using switch case to select specific function from user choice (like strlen, strcat, strcpy, strcmp, strrev)
2. Write a program (WAP) in C to reverse a linked list iterative and recursive.
3. WAP in C to implement iterative Towers of Hanoi.
4. WAP in C++ to count the no.s of object of a class with the help of static data member, funtion and constructor.
5. WAP in C++ & Java to declare a class Time with data members mm for minutes, ss for seconds and hh for hours. Define a parameterize constructor to assign time to its objects. Add two time objects using member function and assign to third objects. Implement all possible cases of time.
6. WAP in C++ to define a class Complex to represents set of all complex numbers. Overload '+' operator to add two complex numbers using member function of the class and overload '*' operator to multiply two complex numbers using friend function of the class complex.
7. Implement simple multi-threaded server to perform all mathematics operation parallel in Java.
8. Write a program in to prepare a list of 50 questions and their answers.
9. Write a program to display 10 questions at random out of exp.8-50 questions (do not display the answer of these questions to the user now).
10. Implement producer-consumer problem using threads.

NOTE:- At least 8 Experiments out of the list must be done in the semester.