# **COLLEGE OF ENGINEERING, TRIVANDRUM**

### **DEPARTMENT OF COMPUTER APPLICATIONS**

# PROGRAMMING LAB – 20MCA131 (S1 MCA)

#### LIST OF EXPERIMENTS

### CYCLE - I

- 1. Write a python program to find the area of a circle.
- 2. Write a python program to convert temperature from Celsius to Fahrenheit.
- 3. Write a python program to swap two numbers without using temporary variables.
- 4. Write a python program to prompt the user for a list of integers. For all values greater than 100, store 'over' instead.
- 5. Write a python program to enter 2 lists of integers. Check (a) Whether lists are of same length (b) whether list sums to same value (c) whether any value occurs in both.
- 6. Write a python program to read a list of integers, create a list removing even numbers.
- 7. Write a python program to print out all colors from color-list1 not contained in color-list2.
- 8. Write a python program to sort the dictionary in ascending and descending order.
- 9. Write a python program to merge two dictionaries.
- 10. Write a python program to find gcd of 2 numbers.

# CYCLE II

- 11. Write a python program to generate a positive list of numbers from a given list of integers using List comprehensions.
- 12. Write a python program to form a list of vowels selected from a given word using List comprehensions.
- 13. Write a python program to accept a file name from the user and print extension of that.

- 14. Write a python program to create a single string separated with space from two strings by swapping the character at position 1.
- 15. Write a python program to get a string from an input string where all occurrences of the first character are replaced with '\$', except the first character.[eg: onion -> oni\$n]
- 16. Write a python program to count the occurrences of each word in a line of text.
- 17. Write a python program to check whether a given year is a leap year or not.
- 18. Write a python program to check whether a given number is prime or not.
- 19. Write a python program to check whether a given number is Armstrong or not.
- 20. Write a python program to check whether a given string is palindrome or not.

#### CYCLE III

- 21. Write a python program to find the factorial of a number using functions.
- 22. Write a python program to generate Fibonacci series of N terms using functions.
- 23. Write a python program to display the given pyramid with step number accepted from user using functions.

Eg: N=4

1

2 4

369

481216