GOVERNMENT ENGINEERING COLLEGE, PATAN
COMPUTER SCIENCE AND ENGINEERING
B.E. SEM I/II (CSE/EE)
3110003: PROGRAMMING FOR PROBLEM SOLVING
Practical List

1. Write Hello world program.
2. Write a program to that performs as calculator (addition, multiplication, division, subtraction).
3. Write a program to calculate simple interest (i = (p*r*n)/100)
   i = Simple interest
   p = Principal amount r = Rate of interest
   n = Number of years
4. Write a C program to interchange two numbers.
5. Write a C program to enter a distance into kilometre and convert it in to meter, feet, inches and centimetre.
6. Write a C program to find that the accepted number is Negative, or Positive or Zero.
7. Write a program to read marks of a student from keyboard whether the student is pass or fail (using if else).
8. Write a program to read three numbers from keyboard and find out maximum out of these three. (nested if else).
9. Write a C program to check whether the entered character is capital, small letter, digit or any special character.
10. Write a program to read marks from keyboard and your program should display equivalent grade according to following table(if else ladder)

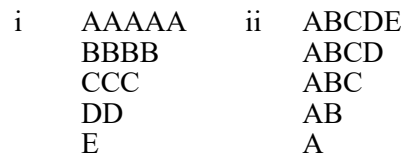
Marks	**Grade**
100 - 80	Distinction
79 - 60	First Class
59 - 40	Second Class
< 40	Fail

11. Write a C program to read no 1 to 7 and print relatively day Sunday to Saturday.
12. Write a C program to find out the Maximum and Minimum number from given 10 numbers
13. Write a C program to input an integer number and check the last digit of number is even or odd.
14. Write a program to generate first n number of Fibonacci series
15. Write a program to find out sum of first and last digit of a given number.
16. Write a C program to find the sum and average of different numbers which are accepted by user as many as user wants
17. Write a program to calculate average and total of 5 students for 3 subjects (use nested for
18. loops)
19. Write a program to evaluate the series 1^2+2^2+3^2+……+n^2
20. Write a C program to find 1+1/2+1/3+1/4+. +1/n.

21. Write a program to print following patterns :

22. Write a program to print following patterns:

23. Write a program to print following patterns:



24. Write a C program to read and store the roll no and marks of 20 students using array.
25. Write a program to replace a character in given string.
26. Write a program to reverse string.
27. Write a function in the program to return 1 if number is prime otherwise return 0.
28. Write a function Exchange to interchange the values of two variables, say x and y. illustrate the use of this function in a calling function.
29. Write a C program to use recursive calls to evaluate F(x) = x – x 3 / 3! + x5 / 5 ! – x 7 / 7! + … xn / n!
30. Write a program to find factorial of a number using recursion.
31. Write a function that will scan a character string passed as an argument and convert all lowercase character into their uppercase equivalents.
32. Define a structure type struct personal that would contain person name, date of joining and salary using this structure to read this information of 5 people and print the same on screen.
33. Define structure data type called time_struct containing three member's integer hour, integer minute and integer second. Develop a program that would assign values to the individual number and display the time in the following format: 16: 40:51.
34. Design a structure student_record to contain name, branch and total marks obtained. Develop a program to read data for 10 students in a class and print them.
35. Write a C program to swap the two values using pointers.
36. Write a C program to print the address of character and the character of string using pointer.
37. Write a program for sorting using pointer.

38. A file named data contains series of integer numbers. Write a c program to read all numbers from file and then write all odd numbers into file named “odd” and write all even numbers into file named “even”. Display all the contents of these file on screen