



# Atria Institute of Technology

## Department of Computer Science and Engineering

### C Programming Lab - 18CPL17/27 Sem: 2

Program No	Name of the Program	Yout-tube Link
2	Develop a program to solve simple computational problems using arithmetic expressions and use of each operator leading to simulation of a commercial calculator. (No built-in math function)	<a href="https://youtu.be/i6rfem86ZhE">https://youtu.be/i6rfem86ZhE</a>
3	Develop a program to compute the roots of a quadratic equation by accepting the coefficients. Print appropriate messages.	<a href="https://youtu.be/JyYqI5SqMYk">https://youtu.be/JyYqI5SqMYk</a>
4	Develop a program to find the reverse of a positive integer and check for palindrome or not. Display appropriate messages.	<a href="https://youtu.be/-rAi59R9zNg">https://youtu.be/-rAi59R9zNg</a>
5	An electricity board charges the following rates for the use of electricity: for the first 200 units 80 paise per unit: for the next 100 units 90 paise per unit: beyond 300 units Rs 1 per unit. All users are charged a minimum of Rs. 100 as meter charge. If the total amount is more than Rs 400, then an additional surcharge of 15% of total amount is charged. Write a program to read the name of the user, number of units consumed and print out the charges.	<a href="https://youtu.be/eflCpkA3brU">https://youtu.be/eflCpkA3brU</a>
6	Introduce 1D Array manipulation and implement Binary search.	<a href="https://youtu.be/X5vdmOkdhAE">https://youtu.be/X5vdmOkdhAE</a>
7	Implement using functions to check whether the given number is prime and display appropriate messages. (No built-in math function)	<a href="https://youtu.be/lte0wAl-CUK">https://youtu.be/lte0wAl-CUK</a>
8	Develop a program to introduce 2D Array manipulation and implement Matrix multiplication and ensure the rules of multiplication are checked.	<a href="https://youtu.be/8DYfLrrg9CE">https://youtu.be/8DYfLrrg9CE</a>
9	Develop a Program to compute Sin(x) using Taylor series approximation .Compare your result with the built- in Library	<a href="https://youtu.be/otwzGH1aib0">https://youtu.be/otwzGH1aib0</a>

	function. Print both the results with appropriate messages.	
10	Write functions to implement string operations such as compare, concatenate, string length. Convince the parameter passing techniques.	<a href="https://youtu.be/C1CXoKMPZAY">https://youtu.be/C1CXoKMPZAY</a>
11	Develop a program to sort the given set of N numbers using Bubble sort.	<a href="https://youtu.be/ju5ANXwYEUQ">https://youtu.be/ju5ANXwYEUQ</a>
12	Develop a program to find the square root of a given number N and execute for all possible inputs with appropriate messages. Note: Don't use library function sqrt(n).	<a href="https://youtu.be/Y1EVwOuvCU8">https://youtu.be/Y1EVwOuvCU8</a>
13	Implement structures to read, write, compute average- marks and the students scoring above and below the average marks for a class of N students.	<a href="https://youtu.be/7PyvTDLLvLw">https://youtu.be/7PyvTDLLvLw</a>
14	Develop a program using pointers to compute the sum, mean and standard deviation of all elements stored in an array of n real numbers.	<a href="https://youtu.be/BehgKAdeXSY">https://youtu.be/BehgKAdeXSY</a>
15	Implement Recursive functions for Binary to Decimal Conversion.	<a href="https://youtu.be/BQDTCBeiBVc">https://youtu.be/BQDTCBeiBVc</a>