Basic Expression and arithmetic operation Program	
Lab-1	
1.	Write a program to print “Hello World” message.
2.	Write a program to print Name, Address and Birth Date.
3.	Write a program to add, multiply and divide two integers and float numbers.
4.	Write a program to find area of a rectangle.(Area=l*b)
5.	Write a program to find volume of cube.(Area=l*b*h)
6.	Write a program to find area of triangle.(Area=(l*b)/2)
Lab-2	
7.	Write a program in C to convert the given temperature from Fahrenheit to Celsius using the formula C = (F – 32) / 1.8
8.	Write a program convert temperature from Celsius to Fahrenheit where temperature in Celsius is entered by user.(C = 5/9 (f – 32))
9.	Write a program to calculate area of circle.(pi*r*r)
10.	Write a program in C to find the Circumference of a circle.(2*pi*r)
11.	Write a program in C to calculate simple interest using formula SI = (P*R*N) / 100.
Lab-3	
12.	Write a program in C to display sum from 1 to N using the formula N(N+1)/2.
13.	Write a program that reads the radius of sphere “r”, then it calculates its volume “V” and surface area “A” using formulas. (pi*r*r*4)/3
14.	Write a C program to obtain an hourly pay rate and the number of hours worked by workers. Calculate their pay for the week.
15.	Write a C program to find out the area of right angle triangle using formula area = ½ * base * height.
16.	Write a C program to find out compound interest using following formula Compound Interest = P * (1 + r / 100) ^{n} - P.
Lab-4	
17.	Write a C program to read a floating point number from user and then display the right most digit of the integral part of the number.
18.	Write a C program to read the distance between two cities in KM. and print that distance in meters, feet, inches and centimeters.
19.	Write a C program to convert angle in degrees to radians using formula angle in radians = (angle in degrees * ∏) / 180.
20.	Write a program to accept number of days and print year, month and remaining days.
21.	Write a C program to read a price of an item in (float) like 10.25 and print output in (int) paisa like1025.
22.	Write a C program to read number and display in the form of Hour, Min and Seconds.

Decision making Statement	
Lab-5	
23.	Write a program to Find out Maximum number among two numbers.
24.	Write a program to Check whether given number is positive, negative or zero.
25.	Write a program to arrange any three numbers in ascending order.
26.	Write a program to Find out given year which is leap or not.
Lab-6	
27.	Write a program in C to enter any arithmetic operator (+ - * /) and two integer values and display result according to selection of operator.
28.	Write a program that read a number from 1 TO 7 and then print corresponding day name from the week using switch-case.
29.	Write a program to enter 4 digit numbers from user and display it in string. e.g. Input : 1234 output : One Two Three Four.
30.	Write a program in C to calculate gross salary of employee using : 1. Gross Salary = Basic Pay + DA + HRA – PF. 2. DA = 30% If Basic Pay < 5000 otherwise DA = 45% of the Basic Pay. 3. HRA = 15% of Basic Pay. 4. PF = 12% of Basic Pay.
31.	Write a program to check eligibility of student for admission. Student should fulfill the following criteria for admission : Mathematics >= 50 Physics >= 45 Chemistry >= 60 Total of all subject >= 170 OR Total of Mathematics + Physics >= 120 Accept the marks of all the three subjects from the user and check if the student is eligible for admission. Print the message : Student is eligible for Admission OR Student is not eligible for admission
Lab-7	
32.	Write a program to read marks from keyboard and your program should display equivalent grade according to following table. ========== **Marks Grade** ========== 0-34 Fail 35-59 Second Class 60-79 First Class 80-59 Dist
33.	A manufacturing company classified its executives into 4 levels for the benefit of certain perks. The levels and corresponding perks are shown below:

Levels	Perks	
	Conveyance Allowance	Entertainment Allowance
1	1000	500
2	750	200
3	500	100
4	250	0

Income tax is deducted from the salary on a percentage basis as follows.

Gross Salary	Tax Rate
Gross <= 2000	No Deduction
2000 to 4000	3%
4000 to 5000	5%
Gross > 5000	8%

Write a program that will read an executive's job number, level number and basic pay and then compute the net salary after withholding (deducting) Income tax.
Gross Salary = Basic + HRA + Perks (HRA = 10% of Basic)
Net Salary = Gross Salary – Income Tax

34. An Electric power Distribution Company charges its consumers

Consumption Unit	**Rate of Charges**
For First 50 Units	Rs 2.30
Next 50 Units	Rs 2.60
Next 150 Units	Rs 3.25
More than 300 Units	Rs 4.35

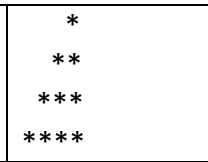
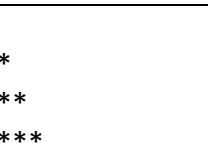
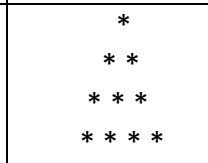
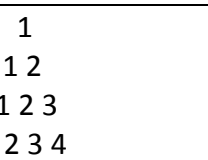
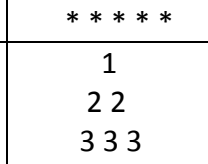
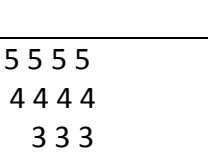
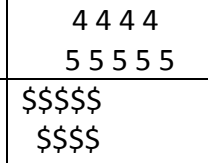
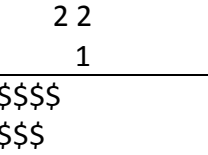
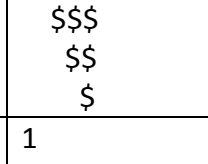
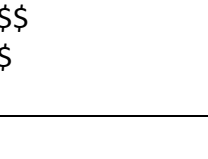
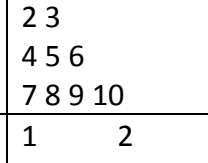
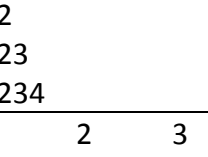
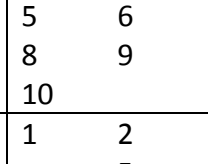
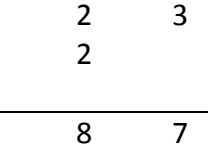
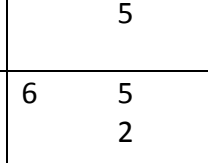
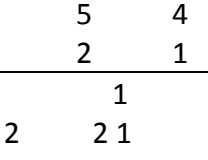
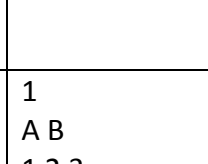
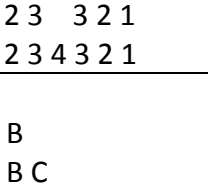
Write a program to take no of units consumed from user and calculate the bill Amount.

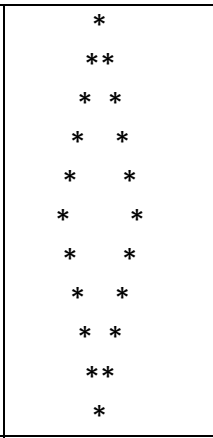
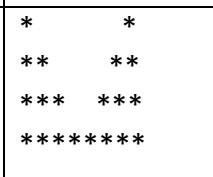
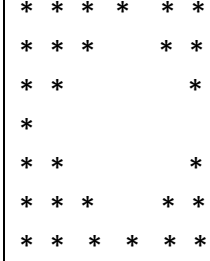
35 Write a program in C for grade calculation using if…else if ladder and switch statement. Accept marks of 3 subjects, calculate total and based on it calculate grade.

Total greater or equal to than 80	Grade A+
Total greater or equal to than 70 and less than 80	Grade A
Total greater or equal to than 60 and less than 70	Grade A–
Total greater or equal to than 50 and less than 60	Grade B+

Control Statement	
Lab-8	
36.	Write a program in C to display a sum of first N even numbers.
37.	Write a program in C to find out factorial of a given number.
38.	Write a program in C to display a sum from 1 to given number 1) Using formula n(n+1)/2. 2) Without using Formula.
39.	Write a program to Print multiplication table of given number entered by user.
40.	Write a program to check whether the given number is prime or not.
Lab-9	
41.	Write a program to accept numbers from the user till their sum exceeds 50.
42.	Print first 50 odd numbers. Note that program should display only five numbers per line.
43.	Write a C program to read 4-digit number and print the sum of first and last digit of the number.
44.	Write a program to find sum of all digits of given number.
45.	Write a program to find reverse of a given number.
Lab-10	
46.	Write a C Program for frequency count for following number. E.g. 12,12,4,6,6,6,7,7 Output is: The frequency of 12 is 2 4 is 1 5 is 1 6 is 3 7 is 2
47.	Write a program to find out and print all prime numbers lying between 1 to 200.
48.	To check whether the given number is valid binary or not.
49.	To check whether the given number is valid octal or not.
50.	Write a program generate Sum of two binary numbers.
Lab-11	
51.	To check whether the giver number is palindrome or not.
52.	Write a program to Check whether number is Armstrong or not.
53.	Write a program to check whether number is krishnamurti or not.
54.	Write program to convert decimal to binary.
55.	Write a program to convert decimal to octal.
Lab-12	
56.	Write a program to convert decimal to hexadecimal.
57.	Write a program to display a table of conversion from Fahrenheit to Celsius. Fahrenheit should start with 0 incremented by 20 and maximum value is 160.
58.	Write a program to print all the numbers and sum of all the integers that are greater than 100 and less than 200 and are divisible by 7.
59.	Write a program to accept amount paid as number (integer) and display it in words. (e.g. Rs 1541 in word : One Thousand Five Hundred Fourty One). Consider user will enter more than 999 and less than 9999.
60	Write a program to find greatest common divisor [GCD] for two positive integer numbers.
61.	Write a program to find least common multiplier [LCM] for two positive integers.

Lab-13, 14, 15, 16(Nested loop)			
61.	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4	62.	1 2 3 4 5 6 7 8 9
63.	* ** *** ****	64.	* ** *** ****
65.	* * * * * * * * * * * * * * *	66.	1 1 2 1 2 3 1 2 3 4
67.	1 2 2 3 3 3 4 4 4 4 5 5 5 5 5	68.	5 5 5 5 5 4 4 4 4 3 3 3 2 2 1
69.	$$$$$ $$$$ $$$ $$ $	70.	$$$$$ $$$$ $$$ $$ $
71.	1 2 3 4 5 6 7 8 9 10	72.	1 12 123 1234
73.	1 2 3 4 5 6 7 8 9 10	74.	1 2 3 4 1 2 3 1 2 1
75.	1 2 3 5 4 6	76.	9 8 7 6 5 4 3 2 1
77.	6 5 4 2 3 1	78.	1 1 1 2 2 1 1 2 3 3 2 1 1 2 3 4 3 2 1
61.	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4	62.	1 2 3 4 5 6 7 8 9

63.		64.	
65.		66.	
67.		68.	
69.		70.	
71.		72.	
73.		74.	
75.		76.	
77.		78.	
79.		80.	

81		82	
83		84	
85	Write a program of Pascal triangle. 1 1 1 1 2 1 1 3 3 1 1 4 6 4 1	86	a b c d e a b c d a b c a b a
87	1 0 1 1 0 1 0 1 0 1 1 0 1 0 1	88	1 1 3 1 3 5 1 3 5 7 ……n
89.	1 4 9 16 25 1 4 9 16 1 4 9 1 4 1	90.	A a A a A a A a A
91	a b c d e f g h i	92	1 2 1 2 3 2 1 2 3 4 3 2 1 2 3 4
93		94	

Series (Lab-17,18,19) Find out the Sum of following series	
95.	1+2+3+….+n
96.	2+4+6+….+n
97.	1+3+5+7+….+n
98.	12 + 22 + 32 + 42 + 52+ ….+n
99.	22 + 42 + 62 + 82 + ….+n
100.	22 - 42 + 62 - 82 + ……
101.	$1^2 +2^2 +3^2 +4^2$ ….+n^2
102.	1 +4 -9 +16 -25 +36 ….+n^2
103.	1! +2! +3! +4! +….n!
104.	1/1! +1/2! +1/3! +….1/n!
105.	1/22 + 1/42 + 1/62 + 1/82 + ….+n
106.	X + X^2/2! + X^3/3! + X^4/4! + ….+n
107.	X + X^3/3! + X^5/5! + X^7/7! + ….+n
108.	x +x^2 +x^3 +x^4 +….+x^n
109.	1 +2 +4 +8 +16 +32 +….n terms
110.	1 +1/4 +1/9 +1/16 +….n terms
111.	$1/1^2$ -$1/2^2$ +$1/3^2$ -$1/4^2$ +….n terms
112.	S=x + (x^2/2!) + (x^4/4!) + (x^6/6!) +…. + (x^n/n!)

Array Examples	
Lab-20	
113.	Write a program to print sum of any 10 numbers using 1-D array.
114.	Write a program to find maximum and minimum element from 1- Dimensional array.
115.	Write a program to perform selection sort using 1-D array.
116.	Write a program to perform bubble sort Using 1-D Array.
117.	Write a program of linear and binary search.
Lab-21	
118.	Write a program to insert an element in 1-D array at specified place.
119.	Write a program to delete an element from 1-D array.
120.	Write a program to swap even position number with odd position.
121.	Write a program to Read n x n matrix. Print the original matrix and its transpose.
122.	Write a Program to Read **n x n** two matrices A and B and find sum and multiplication.
Lab-22	
123.	Write a program in C to enter marks of 10 students. Count how many students have secured marks above 80 and below 40.
124.	An election is contested by 5 candidates. The candidates are numbered 1 to 5 and the voting is done by marking the candidate number on the ballot paper. Write a program in C to read the ballots and count the votes cast for each candidate using an array variable count. In case a number read is outside the range 1 to 5, the ballot should be considered as a spoilt ballot and the program should also count the number of spoilt ballots.
125.	Write a program to convert a decimal number to any base(binary/octal/hexadecimal etc.)

126.	Write a program to check whether the given square Matrix is Magic Matrix or Not.(If sum of all rows, columns and both diagonals are same then it is called Magic Matrix)
String Examples	
Lab-23	
127.	Write a program to find string length 1) Using String function strlen() and 2) Without Using String Function.
128.	Write a program to print character with the ASCII code from 0 to 255.
129.	Write a program to copy one string to another without using strcpy() library function.
130.	Write a program to string compare case-sensitive.
131.	Write a program to string compare case-insensitive.
Lab-24	
132.	Write a program that will read a single word and rewrite it in the alphabetical order. I.e. the word STRING should be written as GINRST.
133.	Write a program to count vowels using switch case and getch() function.
134.	Write a program to count word in sentence. Enter String : I am fine **Output :** 3
135.	Write a program to find character in string. **Input :** Enter String : I am fine Enter Character : m **Output :** Character position : 4 Or Character Not found Note : if character is not found than output will be
136.	Write a program to replace character from given string. **Input :** Enter String : I am fine Find : am Replace : are **Output :** I are out
Lab-25	
137.	Write a program to delete character from given string.
138.	Write a program to find string is palindrome or not.
139.	Write a program to append a string.[add one string into another] without using strcat() function.
140.	Write a program to insert a word in specific position within given string.
141.	Write a program to find a word in a string. If found than display starting position of Word otherwise it will display Not found.
Lab-26	
142.	Write a program to delete a given word from a string entered by user. Enter String : I am fine Enter Word : am **Output string** : I fine

143.	Write a program to calculate the total number of capital, small and special character from String.
144.	Write a program Convert all lower-case character into their upper-case equivalent and all upper-case character into their lower-case equivalent.
145.	Write a program that search an item from array of string.
146.	Write a program that will read a sentence and count all occurrences of a particular word. Enter String : This is Class Room. This is my pen. **Output :** This : 2 is = 2 Class = 1 Room = 1 pen = 1
Lab-27	
147.	Write a program in C to read full name of person and reduce it to initial. E.g. if person name is “Anil Dhirubhai Ambani” then the initial is ADA.
148.	Write a program to sorting a name of student entered by user using double dimension character array.
149.	Write a program for substring() function.
Function	
Lab-28	
150.	Write a program in C to generate Fibonacci series with recursive function.
151.	Write a program of binary search using recursion.
152.	Write a program to find GCD of given two Numbers using Recursion.
153.	Write a program in C to find factorial of a given number using recursion.
154.	Write a program in C for a function prime( ) that returns 1 if the argument is prime number and 0 otherwise.
155.	Write a program in C for a function, which will accept a number and its power and print the result.
156.	To finding sum of 10 numbers using recursion function.
158.	Write a function program to interchange value of two variable.(Using global variable)
159.	Write a function which returns 1 if the given number is palindrome otherwise return 0.
160.	Swap the values of two variables using call by reference to a function.