

LAB Assignment on concept of programming using c by navneet kumar solanki dated on 03/04./2020 for INFORMATION TECHNOLOGY SECOND SEM STUDENTS

1. Write a program to print whether a given number is even or odd.
2. : Design and develop a flowchart or an algorithm that takes three coefficients (a, b, and c) of a Quadratic equation ($ax^2+bx+c=0$) as input and compute all possible roots. Implement a C program for the developed flowchart/algorithm and execute the same to output the possible roots for a given set of coefficients with appropriate messages.
3. Design and develop an algorithm to find the reverse of an integer number NUM and check whether it is PALINDROME or NOT. Implement a C program for the developed algorithm that takes an integer number as input and output the reverse of the same with suitable messages. Ex: Num: 2014, Reverse: 4102, Not a Palindrome
4. Design and develop a flowchart to find the square root of a given number N.
5. Implement a C program for the same and execute for all possible inputs with appropriate messages. Note: Don't use library function sqrt(n).
6. Design and develop a C program to read a year as an input and find whether it is leap year or not. Also consider end of the centuries.
7. Write a program to calculate simple and compound interest.
8. Write a program to swap values of two variables with and without using third variable.
9. Write a program to display the size of every data type using "sizeof" operator.
10. Write a program to illustrate the use of unary prefix and postfix increment and decrement operators.
11. Write a program to input two numbers and display the maximum number.
12. Write a program to find the largest of three numbers using ternary operators.
13. Write a program to find the roots of quadratic equation.
14. Write a program to input name, marks of 5 subjects of a student and display the name of the student, the total marks scored, percentage scored and the class of result.