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| SLno | C programs | A |
| 1 | Write a program in C that allows user to enter two numbers and computes Least Common Multiple (LCM) of these numbers. | A prime number is the one that is divisible by 1 or itself. Write a program to determine whether a number is prime or not. |
| 2 | Take a number n as input from the user and determine whether n is an Armstrong number or not. | Take a number n as input from the user and find out whether it is a Perfect number or not. |
| 3 | Find the sum of digits of a number ( ex. If num=5845, sum=22) | Find the reverse of a number (if num=12345, reverse=54321) |
| 4 | Find the largest elements in an integer array | Search an element in an integer array |
| 5 | Program to search an element in a matrix | Program to add 2 matrices |
| 6 | Program to perform basic arithmetic operations using switch statement | Grade description (A-Excellent) calculation using switch statement |
| 7 | Remove the duplicate elements from an integer array | Read two arrays and merge it in sorted order |
| 8 | Program to find the position of substring in a sentence | Program to concatenate 2 sentences(strings) and count the number of works |
| 9 | Program to read and display student details using structure | Program to read and display employee details using structure |
| 10 | Write a C program to print Fibonacci series up to given number of terms as well as upto a specified value of the last term. Define different functions for these two tasks. | Write a program in C to check armstrong and perfect numbers using the function |

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| Slno | A | B |
| 1 | Program to find the determinant of a matrix using functions named readmatrix, detercalc, and displayresult. | Program to multiply 2 matrices using functions named readmatrix, multilpymatrix, and displayresult. |
| 2 | Program to find the largest and smallest element from an array using class and function | Program to merge 2 arrays in sorted order using class and object. |
| 3 | Write a program to print the area of a rectangle by creating a class named 'Area' taking the values of its length and breadth as parameters of its constructor and having a function named 'returnArea' which returns the area of the rectangle. Length and breadth of the rectangle are entered through keyboard. | Write a program to print the area of a circle by creating a class named 'Area' taking the value of its radius as parameter of its constructor and having a function named 'returnArea' which returns the area of the circle. Radius must enter through keyboard. |
| 4 | Implement the class hierarchy of fig considering appropriate data members and member functions  A Class Hierarchy | We want to calculate the total marks of each student of a class in Physics, Chemistry and Mathematics and the average marks of the class. The number of students in the class are entered by the user. Create a class named Marks with data members for roll number, name and marks. Create three other classes inheriting the Marks class, namely Physics, Chemistry and Mathematics, which are used to define marks in individual subject of each student. Roll number of each student will be generated automatically. |
| 5 | Use function overloading concept to find the area of different shapes (square, rectangle and triangle) with same function name | Use function overloading concept to find the area of different shapes (square, rectangle and triangle) with same function name |
| 6 | Program to add two complex numbers using operator overloading | create a program to overload Binary + to add two similar types of objects with friend function |
| 7 | Create a C++ program to implement the class hierarchy of figure considering appropriate data members and member functions (use Virtual functions).  Inheritance | Create a C++ program to implement the class hierarchy of figure considering appropriate data members and member functions |
| 8 | Implement the inheritance relationship shown in the figure | Implement banking transactions using the structure shown in the figure |
| 9 | Program to find the sum of digit and reverse of number using the concept of class and object | Program to sort an array and find the lowest and highest element using class and object |
| 10 | Program for arithmetic operations with exception handling mechanism | Program for arithmetic operations with exception handling mechanism |