

PG-DAC March 2024 C++ Programming Assignment - 4 (15/03/2024)

1. Write a C++ program that accepts the user's first and last name and prints them in reverse order with a space between them.

Sample Output:

Print the name in reverse where last name comes first:

Input First Name: Alexandra Input Last Name: Abramov

Name in reverse is: Abramov Alexandra

2. Write a C++ program to calculate the sum of all even and odd numbers in an array.

Sample Output:

Original array: 1 2 3 4 5 6 7 8

Sum of all even and odd numbers: 20,16

3. Write a C++ program to print the code (ASCII code / Unicode code etc.) of a given character.

Sample Output:

Print code (ASCII code / Unicode code etc.) of a given character:

Input a character: a

The ASCII value of a is: 97

The character for the ASCII value 97 is: a

4. Write a C++ program to enter P, T, R and calculate Simple Interest.

Sample Output:

Calculate the Simple Interest:

Input the Principle: 20000 Input the Rate of Interest: 10

Input the Time: 1.5

The Simple interest for the amount 20000 for 1 years @10 %is:

2000

5. Write a C++ program to enter P, T, R and calculate compound interest.

Sample Output:

Calculate the Compound Interest:

Input the Principle: 20000 Input the Rate of Interest: 10

Input the Time: 1.5

The Interest after compounded for the amount 20000 for 1.5 years

@10% is: 3073.8

6. Write a C++ program to add two binary numbers.

Sample Output:

Addition of two binary numbers:

Input the 1st binary number: 1010 Input the 2nd binary number: 0011

The sum of two binary numbers is: 1101

- 7. Write a C++ program to find the largest element of a given array of integers.
- 8. Write a C++ program to sort a given unsorted array of integers, in wave form.

Note: An array is in wave form when $array[0] \ge array[1] \le array[2] \ge array[3] \le array[4] \ge \dots$

- 9. Write a C++ program to separate even and odd numbers in an array of integers. Put all even numbers first, and then odd numbers.
- 10. Write a C++ program to find the smallest element of a given array of integers.