

# PG-DAC September 2023



## C++Programming

### Assignment - 4

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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:

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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:

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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 :

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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 :  
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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:  
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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  $\text{array}[0] \geq \text{array}[1] \leq \text{array}[2] \geq \text{array}[3] \leq \text{array}[4] \geq \dots$
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.