SHREE ADARSH BCA & MSC IT COLLEGE HADDAD ROAD –BOTAD

ASSIGNMET-2 C++

(INLINE, FRIEND FUNCTION, CONSTRUCTOR)

INLINE FUNCITON:

- 1. Write a c++ program to enter one number and check it is a odd or even.
- 2. Write a c++ program to enter one character and check it is a upper case or lower case.

FRIEND FUNCITON:

- 1. Write c++ program to enter the two number and find the sum of them.
- 2. Write c++ program to enter the three number and find the minimum of them.
- 3. Write c++ program to enter one number and find the factorial of it.
- 4. Write c++ program to enter string and print it reverse.
- 5. Write c++ program to enter string and find the length of it without using string function.

PARAMETERIZED CONSTRUCTOR:

- 1. Write a C++ program to display even, odd, prime number, factorial number and palindrome number from 1 to n number. Define appropriate member functions to perform above task as per user choice given in the following.
 - 1. Even
 - 2 Odd
 - **3 Prime Number**
 - **4 Factorial Number**
 - **5 Palindrome Number**
 - 6 Exit
- 2. Write a program in C++ to check whether a number is positive, negative or zero. Use appropriate data members and member functions.
- 3. Write a C++ program to print odd and even number from 1 to n using appropriate data members and member functions.
 - 4. Write a C++ program to replace all the lower-case letters in a given string with the corresponding capital letters.

For example:

Enter String: computer

Output:

Capital String: COMPUTER

COPY CONSTRUCTOR:

- 1. Create a Student class with attributes like rollnumber, name, marks (subjects which are you learning in this semester including with internal and external marks), total, percentage. Define appropriate methods to input and output data using copy constructor.
- 2. Develop a Library class that contains a collection of books (Book objects). Implement methods to add a book, remove a book, and display all books .
- 3. Write a c++ program to input 10 elements using array. Separate even and odd numbers from array. Calculate sum of even and odd numbers from array. Define appropriate methods to input and output data.
- 4. Write a c++ program to convert temperature from Celsius to Fahrenheit and Fahrenheit to Celsius. You can use the formula of conversion.

For example:
$$^{\circ}$$
 F = (9/5) * C + 32. $^{\circ}$ C = ($^{\circ}$ F - 32) * 5/9

5. Write a C++ program to input string with white space. Display total length, vowels, consonant, special characters and white spaces. Don't use any string function to count total length of string.