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**CS101**

**Assignment #1**

**Note:** **Please complete your assignment as guided by the instructor. Plagiarized work will lead to zero marks or as directed in SOP of institute. The assignment is for practice purpose therefore it is very important that you must complete your assignment on your own otherwise you might face consequences in your Exams. Dead Line of the assignment will be given by the instructor.**

**Write C++ program for the following tasks.**

1. Write a C program to input angles of a triangle and check whether triangle is valid or not.
2. Convert inches into its equivalent yards, foots and inches.
3. Write a program to swap two variables values with and without using third variables.
4. Write a C++ program that takes two operands and one operator from the user, the program should implement basic arithmetic operations – sum, average, product, difference, quotient and remainder of given numbers etc.
5. Write a C++ program that check whether an integer is positive or negative. The program considers 0 as a positive number.
6. Check whether the entered character is vowel or consonant?
7. Print the value of y for given x=2 & z=4 and analyze the output.

* y = x++ + ++x;
* y= ++x + ++x;
* y= ++x + ++x + ++x;
* y = x>z;
* y= x>z? x:z;
* y = x&z;
* y= x>>2 + z<<1;

1. Write a program that’s check whether the given is prime or not?
2. Write a program that prints the reverse of a number user proper logic instead of “cout”. For example your program will take a number from user say 65893 and your logic will reverse the number and print the reverse from of your input number which will be 39856.
3. Write a program that checks weather the number is palindrome or not. Take a number from user (e.g. 7878).

Hint: *A palindromic number is a number that remains the same when its digits are reversed. In other words, it has reflectional symmetry across a vertical axis. For example, 353, 787, and 2332*