

**CSE-104 Assignments**

1. Write a program to find the absolute value of a number entered via the keyboard.
2. Write a program to reverse a given number.  
   For example, given numbers 123 and reverse numbers 321.
3. Any year is input through the keyboard. Write a program to determine whether the year is a Leap Year or Not.
4. Write a program to calculate overtime pay of 10 employees. Overtime is paid at the rate of Taka 12.00 per hour for every hour worked above 40 hours. Assume that employees do not work fractional part of an hour.
5. Write a program that asks the user for a number n and prints the sum of the numbers 1 to n.
6. Write a program to find the range of a set of numbers. Range is the difference between the smallest and biggest numbers in the list. [Using Array to implement this program].
7. Write a program to test whether a string is a Palindrome or not.
8. Write a program to print out all Armstrong numbers between 1 to 500. If sum of cubes of each digit of the numbers is equal to the numbers itself, then the number is called an Armstrong numbers.   
   For example, 153 = (1\*1\*1) + (5\*5\*5) + (3\*3\*3)
9. Write a program to find Fibonacci series up to n numbers of terms.   
   \*\*The Fibonacci sequence is a series where the next term is the sum of pervious two terms. The Fibonacci sequence: 0, 1, 1, 2, 3, 5, 8…………..
10. A positive integer is entered through the keyboard. Write a function to obtain the prime factors of this numbers.

For example, prime factors of 24 are 2, 2, 2 and 3 whereas prime factors of 35 are 5 and 7.

1. Write a function that receives 5 integers and returns the sum, average and standard deviation of these numbers. Call this function from main() and print the result in main().
2. Write a function that receives marks received by students in 3 courses and returns the average and percentage of these marks. Call this function from main() and print the result in main().
3. Write a function that swaps two numbers.
4. Write a function that finds factorial of a number.
5. Write a function that find largest element in a list.
6. Write a C program to find sum of all array elements.
7. Write a C program to find maximum and minimum element in an array.
8. [Write a C program to find second largest element in an array](http://www.codeforwin.in/2015/11/c-program-to-find-second-largest-number-in-array.html).
9. [Write a C program to insert and delete of an element from an array at specified position](http://www.codeforwin.in/2015/07/c-program-to-delete-element-from-array.html).

For example,   
Input elements:   
10  
20  
30  
40  
50

Inserting 25 at position 3   
 Elements of array after inserting: 10, 20, 25, 30, 40, 50  
 Input position to delete: 2  
 Elements of array after deleting: 10, 25, 30, 40, 50

20. Write a script that will ask a user to enter his name, age and his salary. If his age is over 30 and salary over 1 million, display “You are successful”. Otherwise display “Good luck with life ahead.”