CSE 2104 Microprocessors and Microcontrollers Lab

Lab Tasks list

A1 Lab tasks

1.
We are given two strings of same length find the occurrence of each character in both string are equal or not

2.
Take a string from console input. Then reverse it using stack and procedure.
Store the reverse string in a previously used string.
Don't use any further strings.

3.Check perfect number
4.Fibonacci sequence generator
5.Check if 2 strings are anagram

A2 Lab tasks

1. Armstrong number, any digit (upto 4 digit)
2. Palindrome detector (any digit range)
3. Find all palindrome numbers in a given range
4. Remove duplicates from a given array (stack, procedure, parameter passing)
5.

B1 Lab tasks

1.
First Lab task in B1:
Check a number even or odd
If even then save dx 1
else save dx 2

2.
একটা অ্যারে a দেওয়া আছে। সেই আরেতে ১-১০ এর মধ্যে সংখ্যাগুলো আছে। আরেকটা আরে b প্রিন্ট করে দেখাতে হবে যাতে ০-৯ এর মধ্যে কোন সংখ্যা কতবার আছে a এর ভিতর

3.
1 + r^2 + r^3 + ... + r^n
solve this using procedure.
pass the parameters (r, n) using stack

4.
Write a program that checks whether a given string is palindrome. ignore punctuation and spaces.
Use the console to take the input string from the user and print the output in the console.
You can't use another variable/constant to store the length of the string

5. Armstrong number, any digit (upto 4 digit)

6.
Input a = {2, 4, 5, 2, 5, 4, 1} and one output array's size is10, initialized to 0. For each number in the input array we will increment that number location in the output array..
Output array will be = {0, 1, 2, 0, 2, 2, 0, 0, 0, 0}

7.
Write a program that checks whether a give string is palindrome

8.
Input aaaaaabbccc,
Output a6b2c3
Frequency count
Use console input, output and procedure

B2 Lab task

1.
Compare 2 given numbers when:
i) if the 1st number is greater than second one,then print 0001h in dx
ii) if the 1st number is less than second one,then print 0002h in dx
iii) if both numbers are equal, then print 0003h in dx

2.
Akta array deoa ase (size 7). Arekta array banaite hobe (size 2)
Array er first element - koita even number ase
Array er second element - koita odd number ase

3.
Two strings are given.
Count how many substrings of the first string match with the second string and store the first occurrence index value.

4.
An array is given as input : 10,30,25,100,5,15
Find the second maximum and second minimum element of this array, so output will be:
Second minimum : 10
Second maximum : 30

5.
Input : aaaabbcccaa
Output : a6b2c3
Frequency count kintu ebar oi character er pashe oi character kotobar ase oita add kora lagbe
Use console input output and procedure. Use any kind of param passing

6. BCD to BIN
7. Prime sum
8. Bubble sort