F.Y.B.C.A. (Sem I)

Computer Programming & Programming Methodology
Lab Assignment #1

1. Write a program to take input of name, rollno and marks obtained by a student in 4 subjects of 100 marks each and display the name, rollno with percentage score secured.
2. Write a program to find GCD (greatest common divisor or HCF) and LCM (least common multiple) of two numbers.
3. Write a Program to Check Whether a Number is Prime or not.

   Input: n=7

   Output: 7 is Prime No.
4. Write a program to check whether the entered year is leap year or not (a year is leap if it is divisible by 4 and divisible by 100 or 400.)
5. Write a program to find the factorial of a number.
6. Write a program to check number is Armstrong or not.

   Hint: 153=1^3+5^3+3^3
7. Write a program to check whether a date is valid or not.
8. Write a program to check whether the number is palindrome or not.

   Hint: 151
9. Write a program to generate following Fibonacci series:

   Input n=5

   Output: 0, 1, 1,2,3,5
10. Write a program to generate following series:

   Input n=4

   Output: 1,9,36,100
11. Write a program to generate following series:

   Input n=4

   Output: 1, 2, 6, 24

Note: Submission Date will be declare later.

Prof. Krishna Khandwala
Prof. Brijal Panwala

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Computer Programming & Programming Methodology
Lab Assignment #2

1. Write a program that will display large & small number from 1-D array.
2. Write a program that will search an element in 1- D array & if it is found than display the position of it in the array.
3. Write a program that will merge two 1-D arrays into single & display the   resultant array in ascending order.
4. Write a program that will perform addition and multiplication operation on 2-D (multi-dimensional or matrix) array.
5. Write a program that will perform transpose of matrix.
6. Write a program to find the total number of vowels, consonants, uppercase letters, lower , number and special characters in a given string.
   Note: Do not use any library function
7. Write a program to print following string pattern.
      For example, Input: str="HELLO"
            Output:
                        HELLOHELLO
                        HELL   ELLO
                        HEL   LLO
                        HE   LO
                        H   O
8. Write a program that will perform following menu driven program for string.
         i. Reverse the string
         ii. Find length of the string
         iii. Find a substring from the given string
         iv. Contact two strings.
   Note: Do not use any library function
9. Write a program that will check whether inputted string is palindrome or not.
      For example, Input: str="madam"   **Output:** string is palindrome.
10. Write a program to count the number of occurrences of a character in inputted sentence.
11. Write a program to add two numbers using pointers.
12. Write a program to find the sum of all the elements of an array using pointers.

   Note:
   • Submission Date will be declare later.
   • No late Submission will be accepted.

   Prof. Krishna Khandwala
   Prof. Brijal Panwala