

Introduction to Computer Programming and Data Structures

Assignments 01

Maximum Marks: 100

Submission Deadline: **2022-Aug-17**

Assignment problem # AP0101

- Problem: You are provided an array A of size N that contains non-negative integers. Your task is to determine whether the number that is formed by selecting the last digit of all the N numbers is divisible by 11.
- Input:
 - First line: A single integer N denoting the size of the array A .
 - Second line: N space-separated integers.
- Output:
 - If the number is divisible by 11, then print “yes”.
 - Otherwise, print “no”.

[20]

Assignment problem # AP0102

- Problem: Write a C program that tells a given number to words. For example “123456789” should be printed as “Twelve Crore Thirty Four Lac Fifty Three Thousand Seven Hundred Eighty Nine”.
- Aim: to learn switch-case.
- Input:
 - The First line will contain N – the number of inputs.
 - The Second line will contain N integers separated by space.
- Output: Print numbers to words.

[20]

Assignment problem # AP0103

- Problem: Find max/min of N given integers.
- Input: Will be given in two lines.
 - The First line will contain N . number of input.
 - The Second line will contain N integers separated by space.
- Output: max/min of N integers

[20]

Assignment problem: AP0104

- Problem: Given marks in % of a student. Outputs his/her grade as follows. If marks ≥ 80 : grade A+, marks ≥ 60 : grade A, marks ≥ 45 : grade B, marks ≥ 30 : grade C, marks < 30 : grade D
- Input: m ; where $0 \leq m \leq 100$
- Output: A+/A/B/C/D

[20]

Assignment problem # AP0105

- Problem: Find the Factorial of a given number.
- Aim: to learn 'For loop'.
- Input: A non-negative integer n .
- Output: Factorial of n .

[20]

Assignment problem # AP0106

- Problem: Check whether a given list is a palindrome. A palindrome is the same if read forward or backward, for example $\{1, 2, 0, 2, 1\}$.
- Aim: to learn 'For loop'.
 - The First line will contain n . the number of input.
 - The Second line will contain n integers separated by space.
- Output:
 - If the list is a palindrome, then print "yes".
 - Otherwise, print "no".

[20]