

Assignment 1.

Question 1

Due date Friday-05/06/15

1. Define a class TEST in C++ with the following description:

Private Members

1. TestCode of type integer.
2. Description of type string.
3. NoCandidate of type integer .
4. CenterReqd (number of centers required) of type integer .
5. A member function CALCNTR() to calculate and return the number of centers as $(\text{NoCandidates}/100+1)$.

Public Members

1. A function SCHEDULE() to allow user to enter values for TestCode,
2. Description, NoCandidate & call function CALCNTR() to calculate the number of Centres

A function DISPTTEST() to allow user to view the content of all the data members .

Question 2

Define a phone_number class containing a name of a person/company (as a string) and a phone number (again as a string). Include a constructor and appropriate selector methods.

Question 3

Using two-dimensional arrays, write a function (and a corresponding program to test it) which multiplies an $m \times n$ matrix of integers by an $n \times r$ matrix of integers. Use global constant declarations before the main program to give test values for m , n and r .

Question 4

Write a function named "eliminate_duplicates" that takes an array of integers in random order and eliminates all the duplicate integers in the array. The function should take two arguments:

(1) an array of integers;

(2) an integer that tells the number of cells in the array.

The function should not return a value, but if any duplicate integers are eliminated, then the function should

change the value of the argument that was passed to it so that the new value tells the number of distinct integers

in the array.