Task given at 02 July 2018
Submission deadline: 28 July 2018.

The Task

A) Create a program written in C with below requirements -
   1) A menu should be displayed to list down operations from where user can input desired operation by providing an integer input. For example,
      - 0….Exit
      - 1….View all elements
      - 2….Insert new element
      - 3….Search an element
      - 4….Delete an element (user should input item to be searched and delete)
      - 5….Sort elements in ascending order
      - 6….Sort elements in descending order
      - 7….Find memory location of an element (user should input index number). You should use the formula to calculate memory address from base address of an array.
   2) Array boundary checking should exist, when user input index number (i.e. menu item 7)
   3) Value checking should exist, so that user provides only integers and no other types (character and special symbols etc.) are allowed.
   4) After user performs an operation by selecting an operation number, program should clear the screen and display the menu again until user selects 0 to exit from the program.
   5) Memory allocation should be dynamic. For you convenience, you can start coding by declaring arrays statically, however, before submission, you have to change it to use dynamic allocation.

B) Create another program using C++ with similar requirements as of (A).

Take Detail

You should create two programs written in C and C++. Probably from next task, you will be coding in C++ only.

You may want to chose the array size N big enough (say, 100). As initially array will be empty, you should keep track of number of elements by a variable (say, n, where N=100 but n=0)

Students code will be analyzed to detect copy. If two codes are found similar or identical, then both will score zero.

As you are uploading to GitHub, your folder will contains last update time. Any delayed submission will score zero.

Code submission

Share your code by providing your GitHub link to ahsan.habib@hstu.ac.bd with email subject: *CSE202-task1*, and email body: *GitHub link*.