

# Assignment 7: Program on Sorting in lexicographic order

- Given two array
  - *int marks[ ]* // marks in a course
  - *char names [ ]* // names of students in a course
- Write two programs using (1) selection sort and (2) insertion sort to arrange entries in *names[ ]* in a lexicographical order. Appropriately arrange *marks[ ]* array.
  - **Example:** *char names[ ][MaxLength]* = {"Bharat","Chandrika","Aravind"} and *marks[ ]* = {70,90,80}
  - Then output: *names[ ][Maxlength]* = {"Aravind","Bharat","Chandrika"} and *marks [ ]* = {80,70,90}

# Assignment 7

- For development of the program and its testing, include *names[ ]* and *marks[ ]* from test-data.c file and for final demonstration of the working of the program, include data from final-data.c file
- Programs are due on Sunday, Oct 20, 2019, at 5:00 pm.

# Program 2: Check if the number entered is Perfect Number

- A *perfect number* is a positive integer that is equal to the sum of its positive divisors. For instance, 6 has divisors 1, 2 and 3 (excluding itself), and  $1 + 2 + 3 = 6$ , so 6 is a perfect number.
- Write a C program
  - To input an integer  $n$
  - Check if it is Perfect
- Make the output as pretty as you can
- Make the program readable with adequate documentation
- Upload the program *some\_program\_name.c* in moodle by Sunday, September 1, 2019, before 5:00 pm