

## Homework Assignment #5

### Array Rotator

The array rotator is a program that does the rotation of an array of size **n** by **d** elements. The rotated elements will be saved in a new array. The rotation could be clockwise or counterclockwise.

Example:

Initial Array: a b c d e f g

1) A counterclockwise rotation by 2 elements generates the following result:

New Array: f g a b c d e

2) A clockwise rotation by 3 elements generates the following result:

New Array: d e f g a b c

Write a code of a program to do the following tasks:

- 1) Ask the user to enter the values of n and d,  $d < n$ .
  - 2) Ask the user to enter the elements of the array, the elements are **characters**.
  - 3) Ask the user about the orientation of the rotation (clockwise/counterclockwise).
  - 4) Perform the rotation task and display the elements of each array in one line.
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- a) You have to write a function that rotates the table and returns a pointer to the new array.
  - b) You have to write a function that takes a pointer to an array as an argument and use it to display the elements on the same line.
  - c) You have to submit **arrayRotator.cpp** file.
  - d) The homework is due **Sunday, October 19, 2014, 11:59 pm**