

## AP Computer Science Chapter 7

### Mini Lab

#### (1) Shift the Array Elements

Write a method called `arrayShift(int[] oldArray, int[] newArray, String Direction, int shiftNumber)`, which is passed an array, `x`, of integers and an integer shift number of `n` positions in either direction. The method creates a new array with the items of `x` moved forward by `n` positions. Elements that are shifted off the array will appear at the end. For example, suppose `x` contains the following items in sequence:

1 2 3 4 5 6 7

After shifting by 3 positions in the "LEFT" direction, `arrayShift(x, b, "LEFT", 3)`, the new array `b` will appear in this sequence:

4 5 6 7 1 2 3

After shifting by 4 positions in the "RIGHT" direction, `arrayShift(x, b, "RIGHT", 4)`, the new array `b` will appear in this sequence:

4 5 6 7 1 2 3

Array `x` should be left unchanged by this method.

#### (2) Palindrome

Write a program to test a sequence of numbers or characters (int is OK) from user input in the command line and check to see if this sequence of numbers form a "Palindrome" pattern or not. If it forms a "Palindrome" you should return "true", otherwise, return "false".