## Worksheet \#11: One-dimensional Iterative Averaging Example

Name: $\qquad$ Netid: $\qquad$

1) Assuming $n=9$ and the input array below, perform one iteration of the iterative averaging example by only filling in the blanks for odd values of $j$ in the myNew[] array. Recall that the computation is "myNew[j] = (myVal[ji-1] + myVal[j+1])/2.0;"

| index, $\mathbf{j}$ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| myVal | 0 | 0 | 0.2 | 0 | 0.4 | 0 | 0.6 | 0 | 0.8 | 0 | 1 |
| myNew | 0 |  | 0.2 |  | 0.4 |  | 0.6 |  | 0.8 |  | 1 |

2) Will the contents of myVal[] and myNew[] change in further iterations, after myNew above in 1) becomes myVal[] in the next iteration?
