

6) The output of the program will be:

BEFORE: A=[1, 2] B=[3, 4]

BEFORE: X=[1, 2] Y=[3, 4]

AFTER: X=[3, 4] Y=[1, 2]

AFTER: A=[1, 2] B=[3, 4]

This program does not swap A and B but does swap X and Y. This happens because the method creates a shallow copy of the two arrays. X and Y are swapped but they are de-initialized at the end of the method.

7) The output of the program will be:

BEFORE: A=[1, 2] B=[3, 4]

BEFORE: X=[1, 2] Y=[3, 4]

AFTER: X=[3, 4] Y=[1, 2]

AFTER: A=[3, 4] B=[1, 2]

X and Y are swapped but the method as well as A and B because it creates a deep copy this time around. By swapping every element instead of simply the addresses like in the previous question, A and B are effectively swapped.