CS 2401 Spring 2022

Lab 4: Dynamic Arrays and The Big 3

Due: Friday 2/11 at 11:59 PM

Type your answers on this sheet making sure to list the question numbers.

Part 1 ("The Big 3")

1. 2 4 6 8 10 12 14

   2 4 6 5 10 15 14

2. Yes, this is a problem because the data inside the first array changed when it shouldn't have.
3. After the two arrays were set equal to each other, they both pointed to the same address in memory, so whatever changes were made to the second array reflected themselves in the first.

4. 2 4 6 8 10 12 14

   2 4 6 8 10 12 14

5. Yes, the two are the same now, meaning that the data inside the first array didn't change!
6. The assignment operator made the second array BEFORE copying over the data from the first.

Part 2 (bad_alloc)

7. 0x1037040

   0x10371d8

   0x1037370

   0x1037508

   0x10376a0

   byte_count = 2060

8. ≈ 400 bytes apart? (divide the byte_count by 5)

9. 0x867040

   0x867040

   0x867040

   0x867040

   0x867040

   0 bytes apart

10. byte_count = 60
11. The deconstructor deallocated the dynamic memory when it was no longer in use.