Problem 4 (25 points): Arrays

The function below is supposed to remove all instances of a specific value from an array. The function takes four parameters: n (the value to be removed), list (the array of integers), length (the length of the array), and count_ptr (a parameter written by remove_all to indicate the number of instances of n removed from the array). The function returns the adjusted length of the array (the original length minus the number of instances of n removed). You may assume that length is positive.

Unfortunately, Prof. Lumetta has again left blanks in the code.

Fill in the blanks to complete the code. Note that this problem is NOT MULTIPLE CHOICE. **Write the correct code directly on the blanks to complete the function.**

```
int remove_all (int n, _____ ,          // blank #1

                int length, int* count_ptr)

{
    int adj_len = 0;
    int i;

    for (i = 0; _____ ; i++) {          // blank #2

        if (n != list[i]) {

            list[adj_len++] = _____;     // blank #3

        }

    }

    *count_ptr = _____;                 // blank #4


    _____ ;                             // blank #5
}
```