

## GNG 1106 Homework Problem Set 4

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### Question 1:

This program not have any errors or leaks and will run successfully. The running result will be **4**.

### Question 2:

This program will have two errors. The first error is that the variable 'i' has not been declared as an integer before being integrated into the for loop. The second error comes from the line 'a = b'. You cannot assign whole arrays, as the array already has an initial set size. The array cannot take on a new address or a new size, thus creating a problem when trying to assign two initially different arrays as equal to each other.

### Question 3:

This program will not have any errors or leaks and will run successfully. The running result will be **5**.

### Question 4:

This program will have no errors or leaks and will run successfully. The running result will be:

1, 1  
2, -2  
3, -3

### Question 5:

This function runs despite a pointer being passed to the function instead of an array because the pointer points to the first address of the given array. When the program runs "a[i] = i" it is assumed that the correct location in memory is being pointed to and will display the correct answer, which allows for C to accept the pointer as an array.

### Question 6:

The pointer in this program is declared as an integer, but it is not assigned to point to anything. The code is missing a declaration statement which tells the program that the pointer is pointing to a specific address in memory (i.e "p = &M").

### Question 7:

This program will have a memory leak.