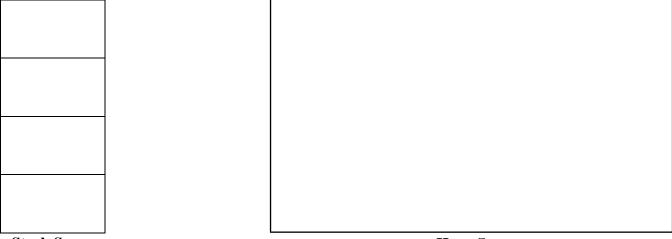
1) (5 pts) ALG (Dynamic Memory Management in C)

Given the following C code.

Answer the following questions about the above lines of code.

- a) Does arr1 and arr2 require the same number of total bytes allocated to be stored in the heap space? Please write yes or no. No reason is needed.
- b) Are <u>all</u> the addresses associated with arr1 (excluding arr1 itself on the stack space) adjacent in memory? Please write yes or no only. No reason is needed.
- c) Are <u>all</u> the addresses associated with arr2 (excluding arr2 itself on the stack space) adjacent in memory? Please write yes or no only. No reason is needed.
- d) Complete the following stack and heap space visual below showing how the memory state looks for both arr1 and arr2 from the above lines of code (after all lines execute properly). For each box you draw in the heap space, indicate what type of variable is stored in the box.



Stack Space Heap Space