# CSCI 2330 – Memory Allocation Exercises

Write a snippet of C code that creates and stores each of the following values in the specified segments of memory.  Assume that each snippet of code exists within a function (i.e., all declared variables are local).  Do not make any assumptions about the size of an int or the word size of the machine.  You do not need to deallocate any memory that you allocate.

1. An int with value 10 on the stack.

2. A pointer on the stack that points to an int on the heap with value 20.

3. A pointer on the stack that points to an int on the stack with value 30.

4. An array of five ints on the stack, with the first int set to 40.

5. An array of five ints on the heap, with the first int set to 50.

6. A pointer on the heap that points to an int on the heap with value 60.
   (Hint: you will need to use a second pointer to do this.)