CSC180 – Lab 4

1. Write a function with the signature
   void printArray(int *arr, int size)
, which takes in an array of integers and its size, and prints out all the elements of the array.

2. Write a function with the signature
   void readAndPrintArray(int *arr, int size)
which takes in an array of integers and its size, and uses the scanf function to read in all the elements of the array from the keyboard by prompting the user for them, and then prints all the numbers. The interaction with the user after the call
readAndPrintArray(my_arr, 4) might look like
   Enter element #0: 5
   Enter element #1: 10
   Enter element #2: 8
   Enter element #3: 500
   You’ve entered the following elements: 5, 10, 8, 500

3. Write a function with the signature
   int arraysAreTheSame(int *arr1, int *arr2, int size)
, which takes in two arrays of integers of size size, and returns 1 if they have the same elements in the same order, and 0 otherwise.

4. Write a function with the signature
   int arr1StartsWithArr2(int *arr1, size1, int *arr2, int size2)
, which takes in array arr1, its size1, array arr2, and its size size2, and returns 1 if
   1) arr1 is the same size as or larger than arr2 and
   2) the first size2 elements of arr1 are the same as the elements of arr2 and appear in the same order
, and returns 0 otherwise

5. Write a function with the signature
   int match(int *arr1, int size1, int *arr2, int size2)
, which returns 1 if there is an i such that 0 <= i <= size1-size2 ands
   arr1[i] = arr2[0]
   arr1[i+1] = arr2[1]
   ...
   arr[i+size2-1] = arr2[size2-1]
and 0 otherwise. For example, if the array arr1 is {4, 10, 2, 3, 50, 100} and the array arr2 is {2, 3, 50}, match returns 1 since the pattern {2, 3, 50} appears in arr1.

Hint: think back to question 4.