Complete ALL questions below. Only partial question(s) will be graded. Download the main.cpp from Moodle and begin your work.

1. Write a function named "sum" that takes as its arguments the following:
   1. an array of floating point values;
   2. an integer that tells how many floating point values are in the array.

The function should return as its value the sum of the floating point values in the array. Thus, for example, if the array that's passed to the function looks like this:

0 1 2 3 4

0.8 | 2.6 | 9.0 | 3.4 | 7.1

then the function should return the value 22.9 as its value.

1. Write a function named "concatenate" that copies the cells of one array into a larger array, and then copies the cells of another array into the larger array just beyond the contents of the first array. The contents of the cells will be integers. The arguments will be as follows:
   1. the first array that will be copied;
   2. the number of cells that will be copied from the first array;
   3. the second array that will be copied;
   4. the number of cells that will be copied from the second array;

The function return the pointer to array that concatenates the two inputted arrays. The function should not alter the contents of the first two arrays. To take an example, if the first two arrays passed to the function look like this:

0 1 2 3 4 5 6 0 1 2 3

58 | 26 | 91 | 34 | 70 | 34 | 88 29 | 41 | 10 | 66

then, provided the size of the large array is 11, the large array should look like this when the function returns:

0 1 2 3 4 5 6 7 8 9 10

58 | 26 | 91 | 34 | 70 | 34 | 88 | 29 | 41 | 10 | 66

1. Write a function named "eliminate\_duplicates" that takes an array of integers in random order and eliminates all the duplicate integers in the array. The function should take two arguments:
   1. an array of integers;
   2. an integer, size, that tells the number of cells in the array.

The function returns a pointer to an array that only contains unique elements. The function should also update the size of the new array. Here is an example.

Suppose the array passed to the function is as shown below, and the integer, size, passed as an argument to the function is 11.

0 1 2 3 4 5 6 7 8 9 10

58 | 26 | 91 | 26 | 70 | 70 | 91 | 58 | 58 | 58 | 66

Then the function should alter the array so that it looks like this:

0 1 2 3 4

58 | 26 | 91 | 70 | 66

and it should change the value of the argument, size, so that it is 5 instead of 11.

**Submission**

Submit your work to Moodle dropbox before deadline stated on Moodle. Do not compress your files.