

```

// ***
// *** You must modify this file
// ***

#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <stdbool.h>
#include "hw08.h"

#ifdef TEST_MAIN
int main(int argc, char * * argv)
{
    int numElem = 0;
    if (argc != 3)
    {
        return EXIT_FAILURE;
    }

    numElem = countVector(argv[1]);

    if(numElem <= 0)
    {
        return EXIT_FAILURE;
    }

    Vector * vecArr = malloc(sizeof( * vecArr) * numElem); //allocates
memory for array

    bool rtv = readVector(argv[1], vecArr, numElem);
    if(rtv == false)
    {
        free(vecArr);
        return EXIT_FAILURE;
    }

    qsort(vecArr, numElem, sizeof(* vecArr), &compareVector);

    rtv = writeVector(argv[2], vecArr, numElem);
    if (rtv == false)
    {
        free(vecArr);
        return EXIT_FAILURE;
    }

    // argv[1]: name of input file (binary)
    // argv[2]: name of output file (binary)

    // check whether there are three arguments.

```

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// If not, return EXIT_FAILURE. DO NOT print anything

// use argv[1] as the input to countVector, save the result

// if the number of vector is 0 or negative, return EXIT_FAILURE

// otherwise, allocate memory for an array of vectors

// read the vectors from the file whose name is argv[1]. save the
// results in the allocated array
// if reading fails, release memory and return EXIT_FAILURE


#ifdef DEBUG
    printVector(vecArr, numElem);
#endif

#ifdef DEBUG
    printf("\n");
    printVector(vecArr, numElem);
#endif

    // write the sorted array to the file whose name is argv[2]
    // if writing fails, release memory and return EXIT_FAILURE


    // releave memory, return EXIT_SUCCESS
    free(vecArr);
    return EXIT_SUCCESS;
}
#endif

```