

# Lab #2

CS-2050 - Section D

Week of February 1, 2021

## 1 Requirements

This lab is intended to test your ability to dynamically allocate memory. You will be provided with a main file in your starter code, but any testing code you produce will not be graded in this lab.

### 1.1 readShortFromFile

```
short* readShortFromFile(FILE *file, int *length);
```



**Info:** This function will read **Short Integers** into a dynamically allocated array from the given file pointer. The first number in the file should be interpreted as the size of the resulting array. This function must check that the call to `malloc()` succeeds, such that the array was successfully allocated.

### 1.2 freeShortArray

```
void freeShortArray(short **array);
```



**Info:** This function takes a double **short pointer** and frees the memory being pointed to. This function should also set the pointer to `NULL` in the calling function.

## 2 Notice



### Grading:

1. Write required *read from file* function
  - \* 7 points
2. Write required *free array* function
  - \* 3 points



### Notice:

1. All of your lab submissions must compile under GCC using the `-Wall` and `-Werror` flags to be considered for a grade.
2. You are expected to provide proper documentation in every lab submission, in the form of code comments. For an example of proper lab documentation and a clear description of our expectations, see the lab policy document.