Lab #2

CS-2050

September 9, 2022

1 Requirements

In this lab, you will cover memory allocation, as well as freeing allocated memory. Remember that whenever you allocate memory, you must *always* check that it is not NULL.

Test code is provided that you may optionally use.

1.1 makeArray

```
int * makeArray(int size);
```

Info: This function will take an integer representing the size of array to allocate. It will then allocate the array, and if successful, initialize it with 0 in each index. If the array was successfully allocated the function will return a pointer to it, otherwise the function will return NULL.

1.2 fillFives

```
void fillFives(int *array, int size);
```

Info: This function will take an integer array, as well as an integer representing the size of the array. It will fill the array with multiples of 5 in increasing order starting with 0 (IE: 0, 5, 10, 15, ...).

1.3 freeArray

```
void freeArray(int **array);
```

Info: This function will take a double pointer to an integer array, and free the memory allocated to the array. The function should also set the array pointer to NULL after freeing.

Notice

Grading:

1. Write required *makeArray* function
   * 3 points
2. Write required *fill* function
   * 1 point
3. Write required *free* function
   * 2 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.