1. Complete the following methods on Searching and Sorting.
2. You may use any language to complete the tasks.
3. You need to submit one single file containing all the methods/functions. You will get two weeks to complete your lab. **NO LATE SUBMISSIONS WILL BE TAKEN**
4. The submission format MUST be maintained. You need to copy paste all your codes in ONE SINGLE .txt file and upload that. If format is not maintained, whole lab submission will be canceled.
5. If you are using JAVA, you must include the **Tester class** containing the main method which should test your other methods.
6. If you are using PYTHON, make sure your code has the methods invoked through **test statements.**
7. Usage of built in methods/libraries are NOT ALLOWED
8. The google form link for this lab is provided in BUX under LAB 6 Searching and Sorting subsection under the SUMMER21 CSE220 lab tab.

Searching and Sorting Lab

1. Sort an array **RECURSIVELY** using **selection** sort algorithm.

2. Sort an array **RECURSIVELY** using **insertion** sort algorithm.

3. Sort a **singly linked** sequential list using **bubble** sort algorithm.

4. Sort a **singly linked** sequential list using **selection** sort algorithm.

5. Sort a **DOUBLY linked** sequential list using **insertion** sort algorithm.

6. Implement **binary search** algorithm **RECURSIVELY**.

7. Implement a recursive algorithm to find the n-th Fibonacci number using memoization.