10/16/2022

Design and Analysis of Algorithm

Assignment 2

Section: K

Group member 1: Sawaira Fatima 20i-0744

Group member 2: Faziha Ikhlaq 20i-0473

Report

- 1. Insertion sort
- 2. Bubble sort
- 3. Selection sort
- 4. Bucket sort
- 5. Quick sort
- 6. Heap sort
- 7. Count sort
- 8. Radix sort
- 9. Merge sort

Member: 1 Algorithm performed (Green):

Roll No: 20i-0744

Section: K

Name: Sawaira Fatima

Member: 2 Algorithms performed (Red):

Roll No: 20i-0473

Section: K

Name: Faziha Ikhlaq

Language Used

- 1. HTML
- **2.** CSS
- 3. JavaScript

Tools Used:

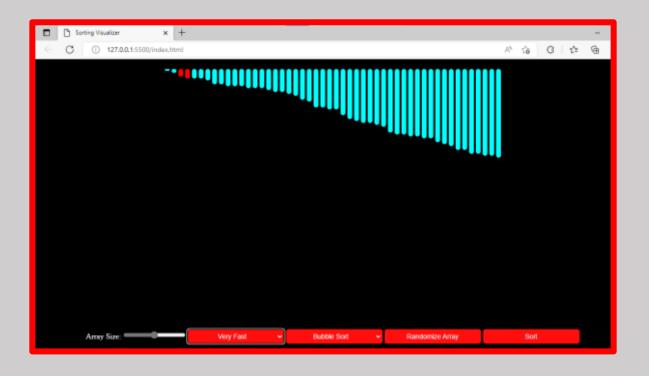
- 1. We have used HTML and CSS purely to create front end visualizations such as the bar, sliders, and separate buttons.
- 2. We have also used JavaScript to run the backend sorting visualizations which include changing the bar heights, colors etc.
- 3. We have made the project using Visual Studio Code editor
- 4. Built in functions have been used as well in order to help in sorting.

How to Run the Code:

- 1. Download the zip file and extract the folder
- 2. Now, open Visual Studio Code and select open Folder Option
- 3. Select the Extracted Folder
- 4. Go to index.html page and click CTRL+S
- 5. At the bottom of the window, there will be a go live option, click it
- 6. A live Server will appear and show you the visualization
- 7. Select length of the array by the slider bar adjustment
- 8. Select the algorithm you want to implement.
- 9. Click on sort and you can adjust speed accordingly

Input/Output Screenshots:





Note: We have used the following links for the aid in sorting in this assignment.

Links/References:

- 1. https://www.geeksforgeeks.org/javascript/
- 2. https://www.w3schools.com/html/default.asp
- 3. https://www.tutorialspoint.com/index.htm

The End