

Coding Bootcamp

Assignment 4 Brief

Following assignment 3 you are required to do a comparative analysis where you need to implement three (3) sorting algorithms:

- 1. Quick Sort [2 marks]
- 2. Bubble Sort [2 marks]
- 3. Bucket Sort [2 marks]

on synthetic data¹ that you produced from assignment 3 for at least forty (40) T-Shirts with various Colors, Sizes and Fabrics [4 marks].

Using each of the previous algorithms you are required to sort these forty (40) T-Shirts based on:

- 1. Size in ascending [10 marks]
- 2. Size in descending [10 marks]
- 3. Color in ascending [10 marks]
- 4. Color in descending [10 marks]
- 5. Fabric in ascending [10 marks]
- 6. Fabric in descending [10 marks]
- 7. Size, Color and Fabric in ascending [15 marks]
- 8. Size, Color and Fabric in descending [15 marks]

Hints: Quick Sort, Bubble Sort, Bucket Sort

You need to submit all the produced files in a zip file named by your_name_assignment_4_.zip

¹ Synthetic Data, https://en.wikipedia.org/wiki/Synthetic data