**Challenge 3**

**Instructions**

1.You can write the code in java language.

2. Upload the code to github with the support of your mentors.

3. Share the link of your github repository on or before 12.00 PM 22nd December 2022.

**Problem**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 47 | 84 | 75 | 21 | 14 | 14 | 79 |

1. Sort the given array using your own algorithm instead of using built in functions and display below.

1. Median
2. Highest value
3. Mode

2. Find the prime numbers of the array and display them as a list.

Reference: <https://www.statisticshowto.com/probability-and-statistics/statistics-definitions/mean-median-mode/>

**Evaluation Criteria**

**Logic related**

1. Data structure and Sorting **3 marks**
2. Algorithm
   1. Median **3 marks**
   2. Highest value **2 marks**
   3. Mode **3 marks**
3. Find the prime numbers of the array and display them as a list **7 marks**

4. Return the outcome **2 marks**

**Code related**

1. Correctness of defining variables, data structures **2 marks**
2. Readability of the code (Cognitive complexity) **2 marks**
3. Empty check and/or null check if applicable **1 marks**
4. Executes without run time errors **5 marks**

Total **30 marks**