CS2023 - Data Structures and Algorithms
In-class Lab Exercise

Week 6

Index Number : 200087A
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GitHub Link for Repo : https://github.com/kavindukalinga/In20-S4-CS2023.git

Github Link for codes : In20-S4-CS2023/Lab6 at main · kavindukalinga/In20-S4-CS2023 (github.com)

(Question 1) Expected output:

```
PROBLEMS   OUTPUT   TERMINAL   DEBUG CONSOLE

PS D:\Academic\ENTC\In20-S4\CS2023 Data Structures and Algorithms\inclass6\code2\output> cd 'd:\Academic\ENTC\In20-S4\CS
t'
PS D:\Academic\ENTC\In20-S4\CS2023 Data Structures and Algorithms\inclass6\code\output> & .\'question 1 code.exe'
17 20 18 6 23 15 11 5 10 8
15 11 5 10 8
1 3 30 4 15 11 5 10 8


  Time taken for the program: 4031000 nanoseconds
PS D:\Academic\ENTC\In20-S4\CS2023 Data Structures and Algorithms\inclass6\code\output>
```

(Question 2) Expected output:

```
PS D:\Academic\ENTC\In20-S4\CS2023 Data Structures and Algorithms\inclass6\code\output> cd 'd:\Academic\ENTC\In20-S4\CS202
t'
PS D:\Academic\ENTC\In20-S4\CS2023 Data Structures and Algorithms\inclass6\code2\output> & .\'question 2 code.exe'
17 20 18 6 23 15 11 5 10 8
15 11 5 10 8
1 3 30 4 15 11 5 10 8


  Time taken for the program: 4049000 nanoseconds
PS D:\Academic\ENTC\In20-S4\CS2023 Data Structures and Algorithms\inclass6\code2\output>
```

(Question 3) Comparison:

Time taken to Execute the Stack implementation using Array: 4031000 ns.
Time taken to Execute the Stack implementation using LinkedList: 4049000 ns.

We can see, Time taken to Execute the Stack implementation using LinkedList is slightly greater than the Time taken to Execute the Stack implementation using Array for these given operations.