DRONE SWARM REPORT

TEB1113 – Algorithm and Data Structure
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Submitted by

24000182	NURUL HANIIZATI BINTI HAZLI
24000574	SARA EUDORA BINTI SAID
22006373	DANIA ADRIANA BINTI MOHD FAIZAL
24000918	ZULAIKHA BINTI MOHD AZHAR
24000227	NUR FATIHAH BINTI MOHD NOOR

Submitted to

Dr M Nordin B Zakaria

CIS Department
Universiti Teknologi PETRONAS, Malaysia

Timing Test On 3 Machine

1. **Model 1 :**

   Device name: MacBook Air

   Processor: Apple M1 (8 cores: 4 performance, 4 efficiency)
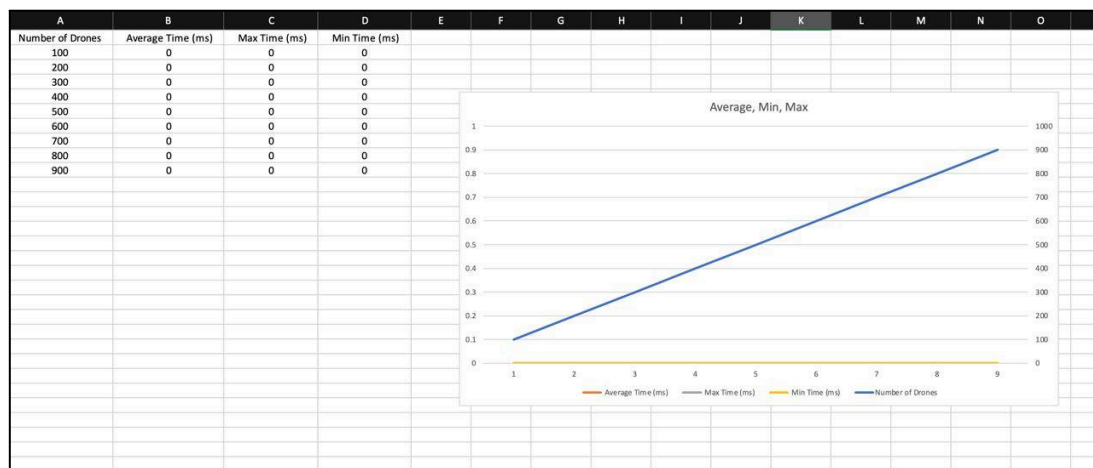
   Installed RAM: 8 GB

   Device ID: Not Available

   Product ID: Not Available

   System type: macOS (System Firmware Version: 10151.121.1, OS Loader Version: 10151.121.1)

   Pen and touch: Not applicable

Number of Drones	Average Time (ms)	Max Time (ms)	Min Time (ms)
100	0	0	0
200	0	0	0
300	0	0	0
400	0	0	0
500	0	0	0
600	0	0	0
700	0	0	0
800	0	0	0
900	0	0	0

Result for Average(), Max(), Min()

Number of Drones	Insertion Sort Time Average (ms)
100	0.001
200	0.002
300	0.006
400	0.005
500	0.008
600	0.009
700	0.011
800	0.012
900	0.014

Result of Average Time for Insertionsort()

Number of Drones	Bubble Sort Time Average (ms)
100	0.02
200	0.078
300	0.173
400	0.303
500	0.47
600	0.674
700	0.948
800	1.194
900	1.534
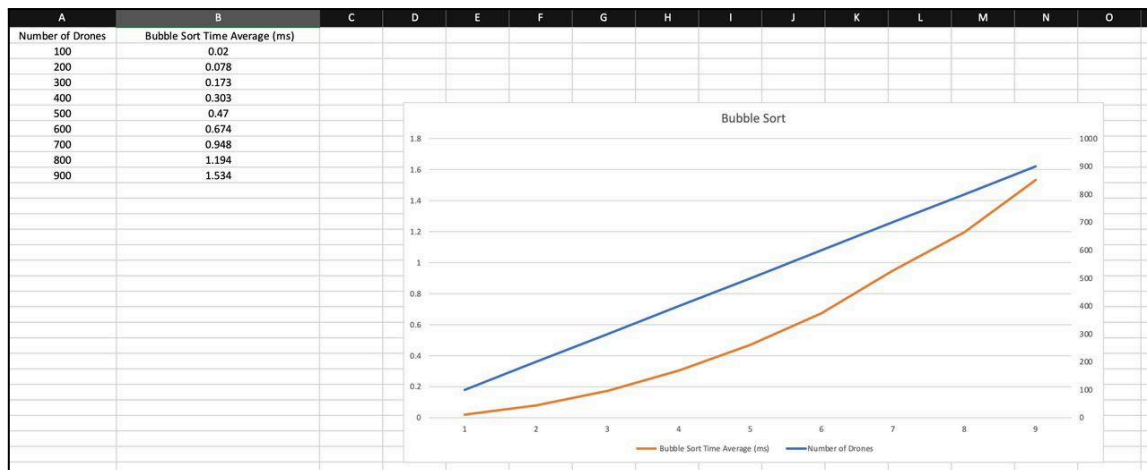
Result of Average Time for BubbleSort()

NumDrones	AppendFrontTime(ms)
100	0
200	0
300	0
400	0
500	0
600	0
700	0.001
800	0.001
900	0
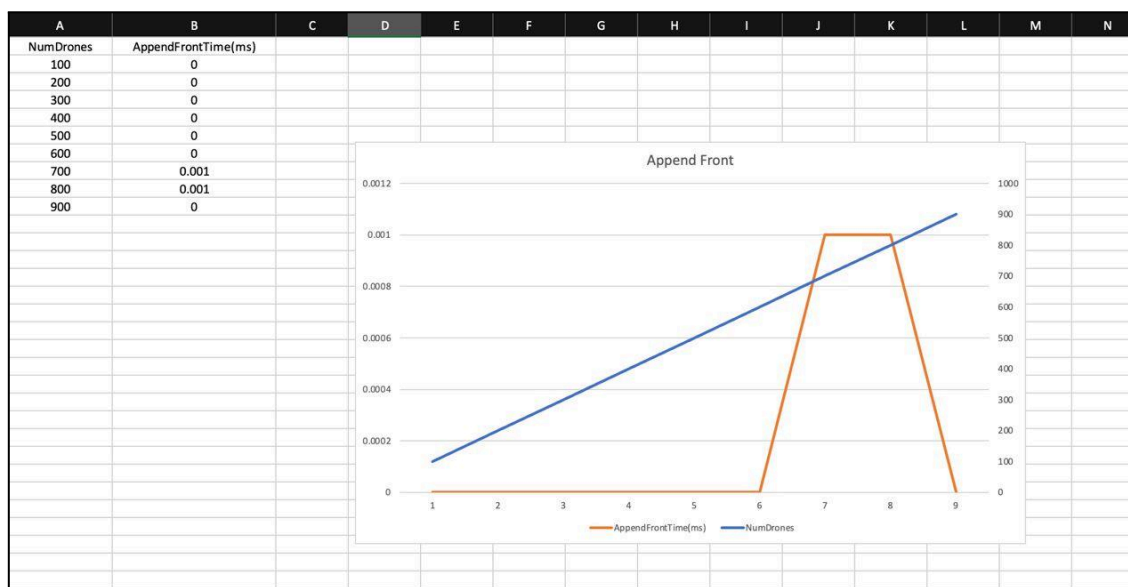
Result of Average Time for AppendFront()

NumDrones	InsertTime(ms)
100	0.002
200	0.002
300	0.003
400	0.003
500	0.003
600	0.023
700	0.006
800	0.006
900	0.004
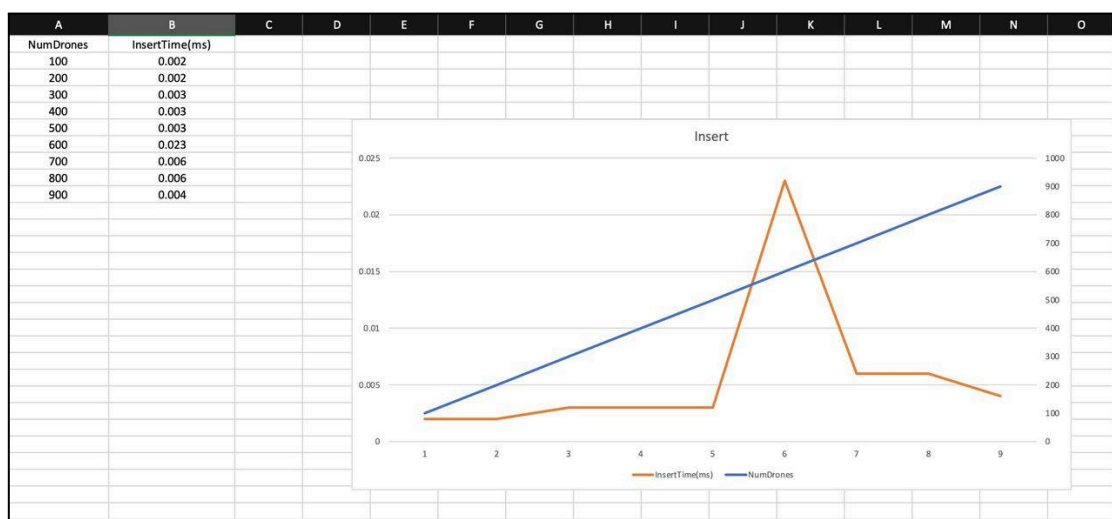
Result of Average Time for Insert(Drone val, int index)

NumDrones	DeleteFrontTime(ms)
100	0
200	0
300	0.003
400	0
500	0
600	0
700	0.002
800	0.007
900	0.001
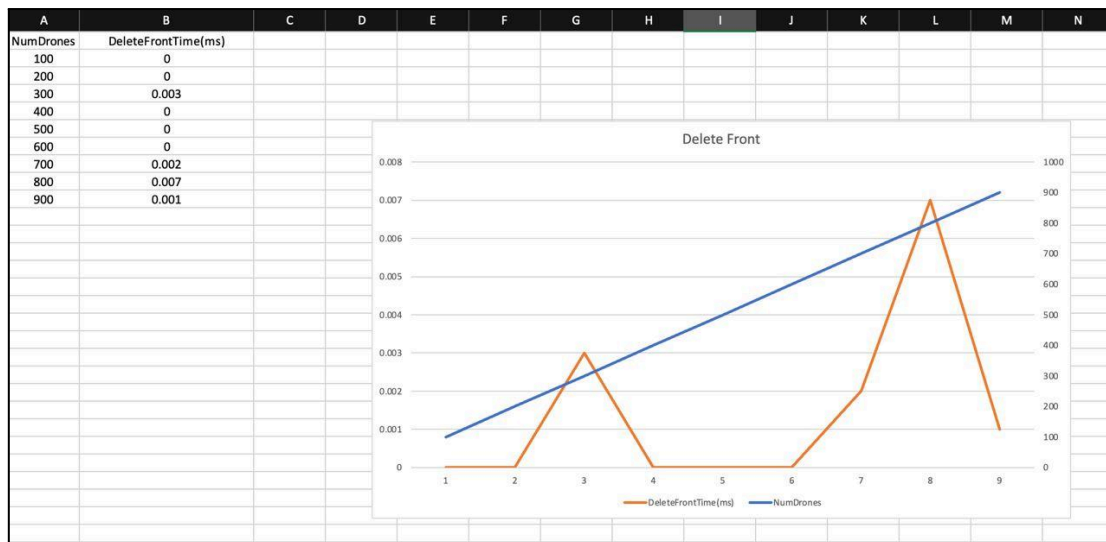
Result of Average Time for DeleteFront()

2. **Model 2:**

   Device name: Zulaikha

   Processor: AMD Ryzen 5 5500U with Radeon Graphics   2.10 GHz

   Installed RAM: 12.0 GB (11.3 GB usable)

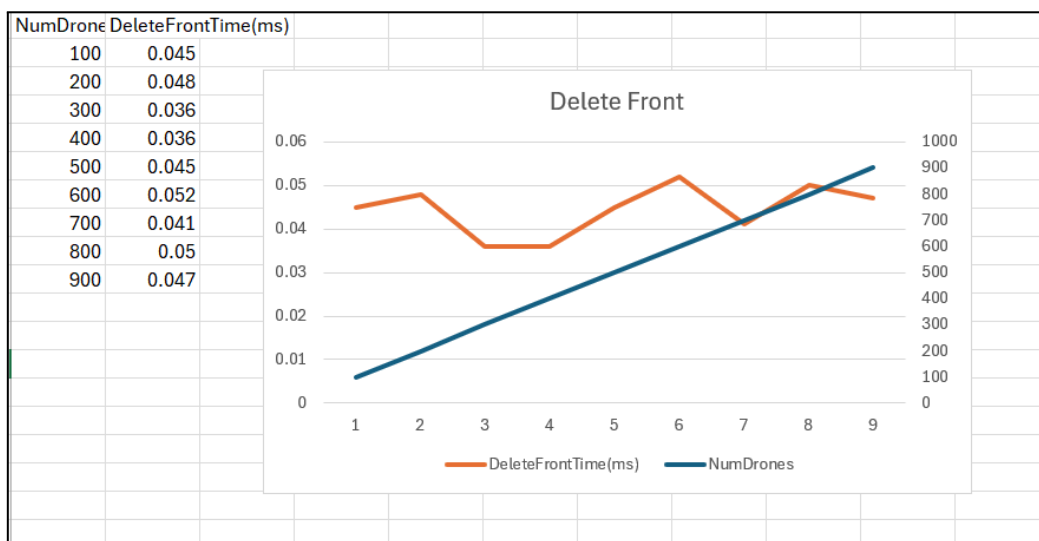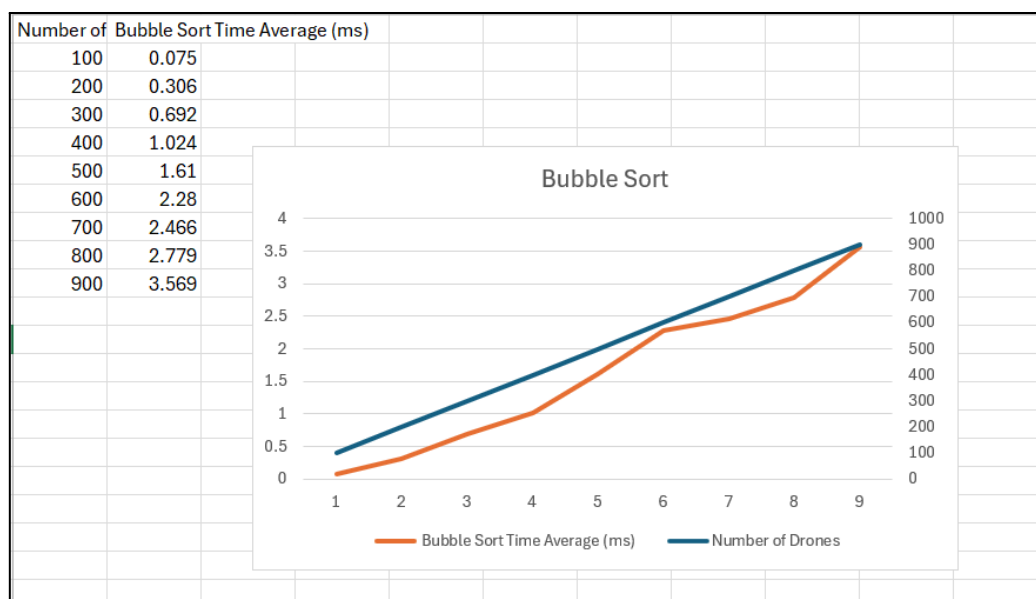   Device ID: 63B92341-33DE-4DD6-9034-7DDB926B28B8

   Product ID: 00356-24562-60827-AAOEM

   System type: 64-bit operating system, x64-based processor

   Pen and touch: No pen or touch input is available for this display

NumDrones	DeleteFrontTime(ms)
100	0.045
200	0.048
300	0.036
400	0.036
500	0.045
600	0.052
700	0.041
800	0.05
900	0.047

Results for deleteFront()

Number of Drones	Bubble Sort Time Average (ms)
100	0.075
200	0.306
300	0.692
400	1.024
500	1.61
600	2.28
700	2.466
800	2.779
900	3.569

Results for bubbleSort()

Number of	Insertion Sort Time Average (ms)
100	0.002
200	0.005
300	0.005
400	0.008
500	0.009
600	0.016
700	0.021
800	0.026
900	0.026
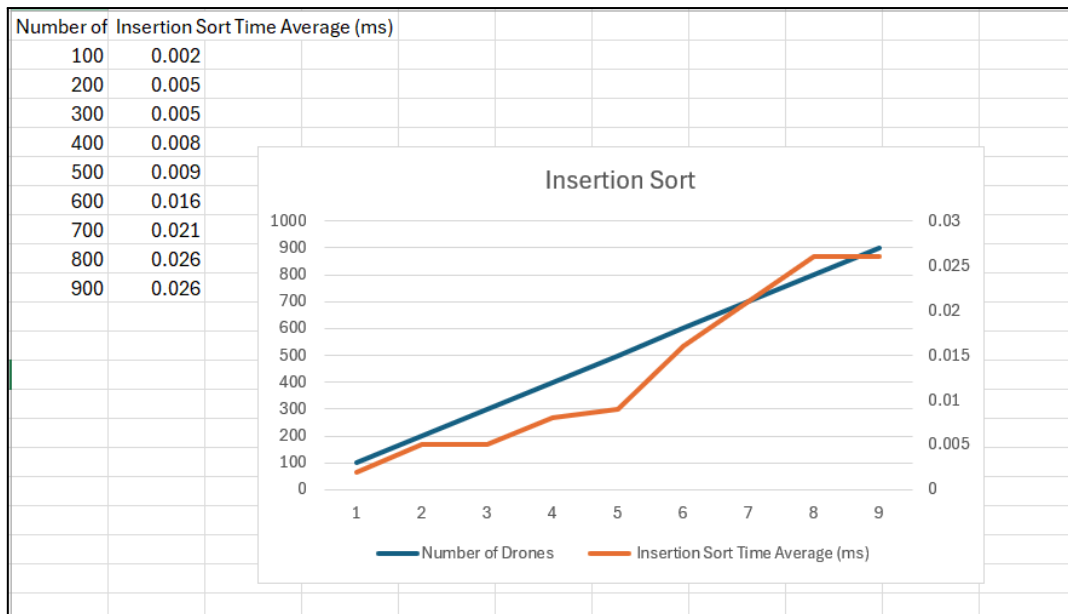
Results for insertionSort()

NumDrone	InsertTime(ms)
100	0.013
200	0.018
300	0.014
400	0.014
500	0.013
600	0.016
700	0.015
800	0.013
900	0.013

Results for insert()

NumDrone	AppendFrontTime(ms)
100	0.005
200	0.005
300	0.004
400	0.006
500	0.008
600	0.007
700	0.006
800	0.008
900	0.008
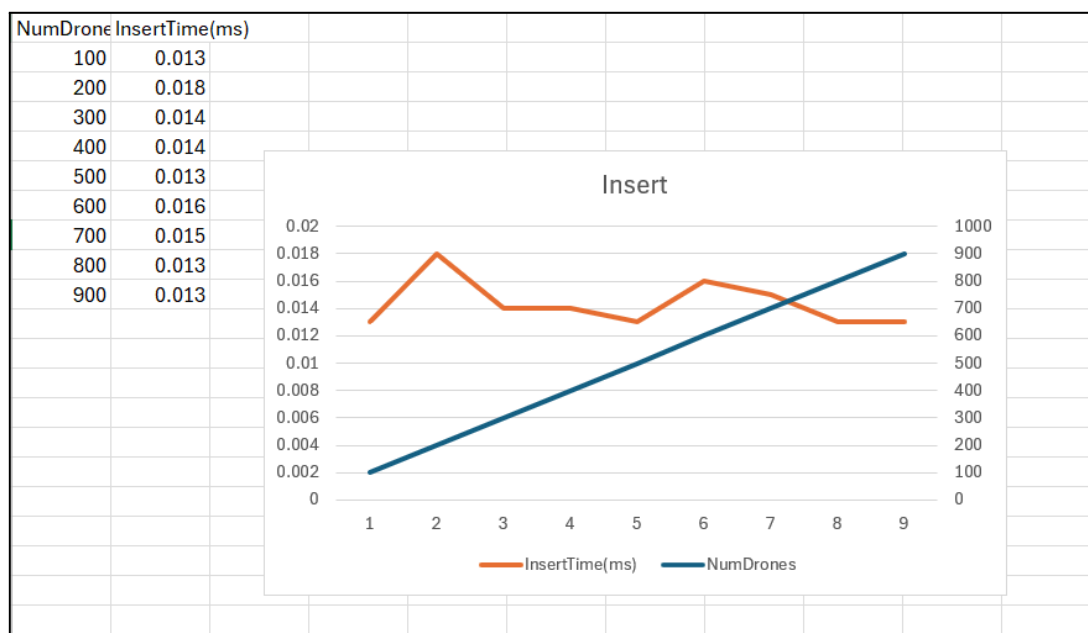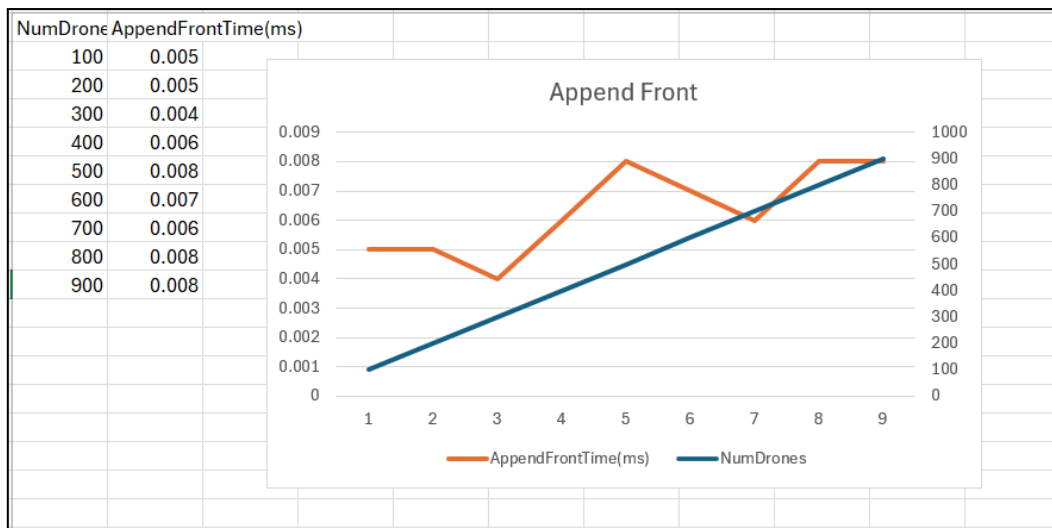
Results for appendFront()

Number of	Average Ti	Max Time (	Min Time (ms)
100	0.001	0.001	0.001
200	0.001	0.001	0.001
300	0.002	0.002	0.002
400	0.004	0.003	0.003
500	0.003	0.003	0.003
600	0.004	0.004	0.005
700	0.005	0.005	0.005
800	0.006	0.006	0.006
900	0.007	0.006	0.006
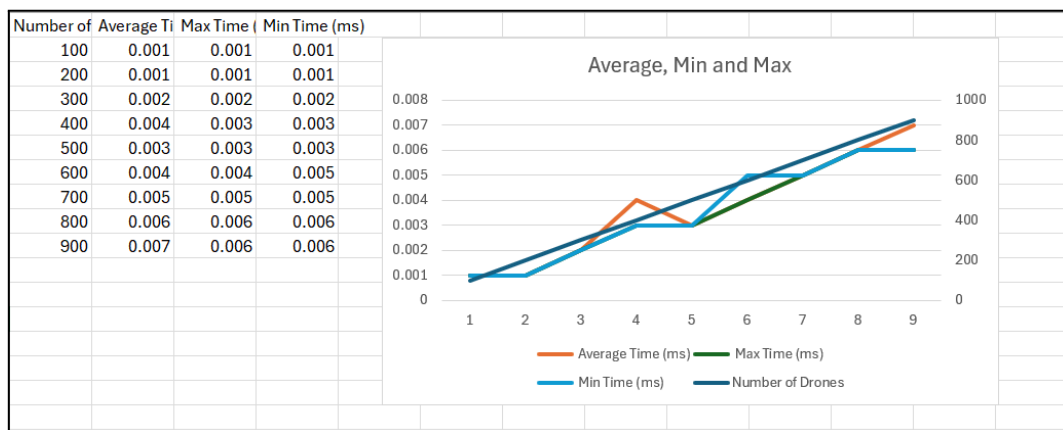
Results for average(), min(), max()