

Assignment 03

Problem 1 :

Method A :

Big O Complexity of Method A is N^3

Method B:

Big O Complexity of Method B is N

Method C:

Big O Complexity of Method B is $N * \log_2 N$

Problem 2 :

Big O Complexity of BubbleSort is N^2

Result :

For Input Array of length 5

```
Please enter the size of the Array : 5
Please enter the Elements of Array :
2
1
6
3
9
Run time in Nano Seconds :5900
Elements of Array in Sorted Order :
1
2
3
6
9
```

For Input Array of length 7

```
Please enter the size of the Array : 7  
Please enter the Elements of Array :
```

```
1  
99  
3  
6  
8  
25  
2
```

```
Run time in Nano Seconds :14900  
Elements of Array in Sorted Order :
```

```
1  
2  
3  
6  
8  
25  
99
```