**SSN College of Engineering, Kalavakkam**

**Department of Computer Science and Engineering**

**III Semester - CSE**

# UCS 1312 Data Structures Lab Laboratory

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| **Academic Year: 2021-2022** | **Batch: 2020-2024** |
| **Date of Assignment: 04.12.2021** | |

**Exercise 12: Implementation of sorting of numbers using selection and shell sort**

The numberADT contains the size of integer array and an array of integers.

* void init(numbertADT \*N) – To initialize the size of the array
* void insertElements (numberADT \*N, int x[10])– To copy the elements from x to the

array in numberADT

* void selSort(numberADT \*N) – Sorting of elements in the array using selection sort
* void shellSort(numberADT \*N) – Sorting of elements in the array using shell sort
* void display(numberADT \*N) – Display the elements in the array

**Note:**

1. Implement numberADT with the specified operations in numberADTImpl.h
2. Write a menu driven application to utilize the numberADT.