

**Institute of Computer Technology**  
**B. Tech. Computer Science and Engineering**  
**Sub: DS (2CSE302)**

**Practical -23**

**Objective:** Implement shell sort and heap sort.

(This practical is in continuation of previous practical scenario, so append code of below scenario along with previous practical)

1. Swati is working on different sorting methods to sort the data. She wants to prepare sorting calculator which provides the facilities to sort all kind of sorting methods for same data. Kindly refer given scenario for calculator and implement it in C:

How many number you want to sort:

8

Enter the Elements for Sorting:

34

22

56

13

89

5

67

45

List of sorting methods:

1. Bubble Sort
2. Insertion Sort
3. Selection Sort
4. Merge Sort
5. Quick Sort
6. Radix Sort
7. Shell Sort
8. Heap Sort
9. Exit

Which choice do you want apply?

7

Pass-1 34 5 56 13 89 22 67 45

Pass-2 34 5 56 13 67 22 89 45

Pass-3 5 13 22 34 45 56 67 89