Sorting Techniques:

a. Selection sort
b. Bubble sort
c. Insertion sort
d. Quick sort
e. Merge sort
f. Heap sort
g. Shell sort
h. Radix sort

Code and compare their running times. Use the best implementations and run them on

a. Integers

b. Real numbers of type double

c. Strings

Input

a. Sorted
b. Un-sorted

Obtain a minimum, average and maximum time for some input size N by generating several random sequences of N items. Use the same input for all increment sequences

Example:

Selection sort

Input: Un-Sorted, Size: 10

	Time		
Input	Min	Avg	Max
Observation 1			
Observation 2			
Observation 3			

Input: Un-Sorted

Size		10	100	1000	10000	50000	100000	500000	
Time	Min								
	Avg								
	Max								

Plot the graph

a. Each sorting technique
b. Each size
c. All sizes and time