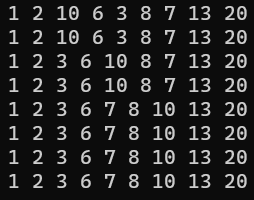
**Homework lecture 1**

**Sort**

1. Given a list of integer numbers: 2, 1, 10, 6, 3, 8, 7, 13, 20. Draw the steps to sort (ascending sort) the list by following methods:

* Selection sort



* Insertion sort

A black background with white numbers

Description automatically generated

* Bubble sort

A black background with white numbers

Description automatically generated

* Merge sort

A diagram of numbers and numbers

Description automatically generated

* Quick sort

A white board with numbers and arrows

Description automatically generated

* Heap sort
* Radix sort

1. Same question for these lists:

* 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
* Selection Sort

A black background with white numbers

Description automatically generated

* Insertion Sort

A black and white background with numbers

Description automatically generated

* Bubble Sort

A black background with white numbers

Description automatically generated

* Merge Sort

A diagram of numbers and arrows

Description automatically generated

* Quick Sort

A table of numbers with red circles and green squares

Description automatically generated

* 10, 9, 8, 7, 6, 5, 4, 3, 2, 1
* Selection Sort

A black background with white numbers

Description automatically generated

* Insertion Sort

A black background with white numbers

Description automatically generated

* Bubble Sort

A black background with white numbers

Description automatically generated

* Merge Sort

A diagram of numbers and arrows

Description automatically generated

* Quick Sort

A diagram of numbers and lines

Description automatically generated with medium confidence

* 9, 10, 1, 2, 3, 4, 5, 6, 7, 8
* Selection Sort

A black background with white numbers

Description automatically generated

* Insertion Sort

A black background with white numbers

Description automatically generated

* Bubble Sort

A black and white background with numbers

Description automatically generated

* Merge Sort

A diagram of numbers and arrows

Description automatically generated

* Quick Sort

A screenshot of a math game

Description automatically generated

* 3, 4, 5, 6, 7, 8, 9, 10, 1, 2
* Selection Sort

A black background with white numbers

Description automatically generated

* Insertion Sort

A number grid with white text

Description automatically generated with medium confidence

* Bubble Sort

A black background with white numbers

Description automatically generated

* Merge Sort

A diagram of numbers and arrows

Description automatically generated

* Quick Sort

A diagram of numbers and circles

Description automatically generated with medium confidence

1. Write a program to sort (ascending sort) the list by following methods:

* Selection sort
* Insertion sort
* Bubble sort
* Merge sort
* Quick sort
* Heap sort
* Radix sort

https://github.com/dung250804/CTDL-GT-HW