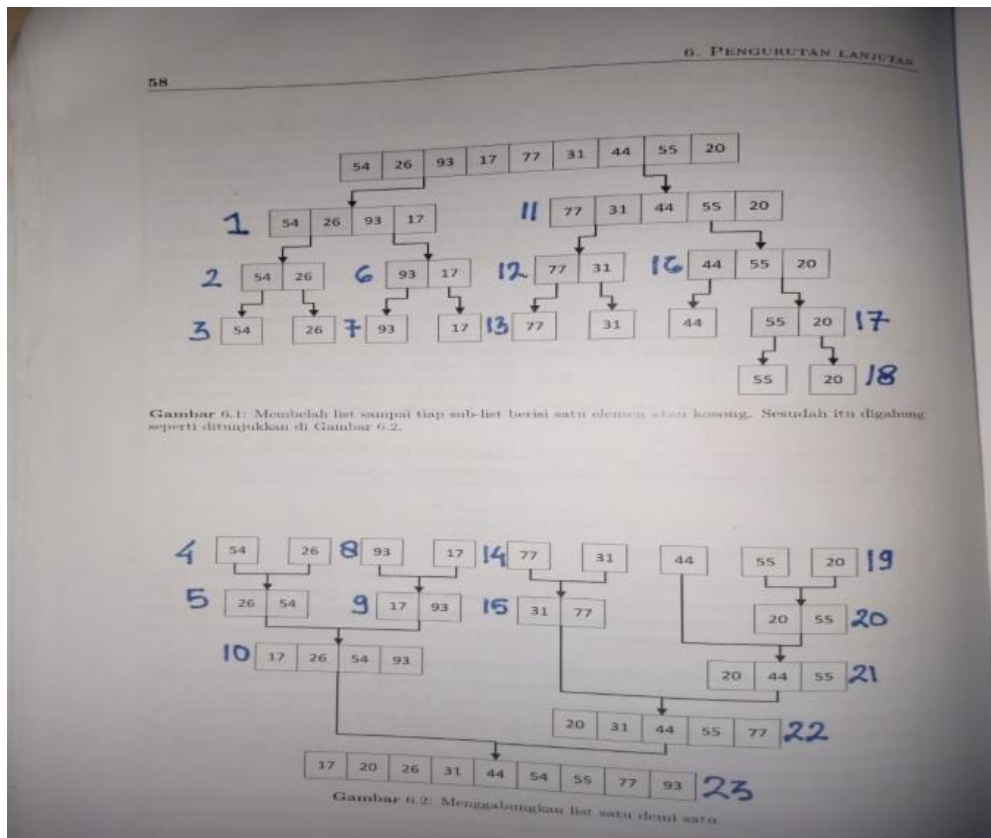


No 2



4. a) Merge sort

$L = [80, 7, 24, 16, 43, 91, 35, 2, 19, 72]$

80	7	24	16	43	91	35	2	19	72
----	---	----	----	----	----	----	---	----	----

Proses 1

7	80	26	24	43	91	2	35	19	72
---	----	----	----	----	----	---	----	----	----

Proses 2

7	16	24	80	2	35	43	91	19	72
---	----	----	----	---	----	----	----	----	----

Proses 3

2	7	16	24	35	43	80	91	19	72
---	---	----	----	----	----	----	----	----	----

Proses 4

2	7	16	19	24	35	43	72	80	91
---	---	----	----	----	----	----	----	----	----

b) Quick sort

L = [80, 7, 24, 16, 43, 91, 35, 2, 19, 72]

80	7	24	16	43	91	35	2	19	72
----	---	----	----	----	----	----	---	----	----

Pivot

80	7	24	16	43	91	35	2	19	72
----	---	----	----	----	----	----	---	----	----

Low

High

Pivot

72	7	24	16	43	91	35	2	19	80
----	---	----	----	----	----	----	---	----	----

Low

High

Pivot

72	7	24	16	43	91	35	2	19	80
----	---	----	----	----	----	----	---	----	----

Low

High

Pivot

72	7	24	16	43	80	35	2	19	91
----	---	----	----	----	----	----	---	----	----

Low

High

Pivot

72	7	24	16	43	19	35	2	80	91
----	---	----	----	----	----	----	---	----	----

Low

High

Pivot

72	7	24	16	43	19	35	2	80	91
----	---	----	----	----	----	----	---	----	----

Low

High

Pivot

2	7	24	16	43	19	35	72	80	91
---	---	----	----	----	----	----	----	----	----

Low

High

Pivot

2	7	24	16	43	19	35	72	80	91
---	---	----	----	----	----	----	----	----	----

Low

High

Pivot

2	7	24	16	43	19	35	72	80	91
---	---	----	----	----	----	----	----	----	----

Low

High

Pivot

2	7	24	16	43	19	35	72	80	91
---	---	----	----	----	----	----	----	----	----

Low

High

Pivot

2	7	24	16	43	19	35	72	80	91
---	---	----	----	----	----	----	----	----	----

Low

High

Pivot

2	7	19	16	43	24	35	72	80	91
---	---	----	----	----	----	----	----	----	----

Low

High

Pivot

2	7	19	16	43	24	35	72	80	91
---	---	----	----	----	----	----	----	----	----

Low

High

Pivot

2	7	19	16	24	43	35	72	80	91
---	---	----	----	----	----	----	----	----	----

Low

High

Pivot

2	7	19	16	24	43	35	72	80	91
---	---	----	----	----	----	----	----	----	----

Low

High

Pivot

2	7	16	19	24	43	35	72	80	91
---	---	----	----	----	----	----	----	----	----

Low

High

Pivot

2	7	16	19	24	43	35	72	80	91
---	---	----	----	----	----	----	----	----	----

Low

High

Pivot

2	7	16	19	24	35	43	72	80	91
---	---	----	----	----	----	----	----	----	----

Low

High

2	7	16	19	24	35	43	72	80	91
---	---	----	----	----	----	----	----	----	----