

12 | 01 | 26

DAA LAB-5

157, 110, 147, 122, 111, 149, 151, 141, 123,
112, 117, 103.

1st → pivot. (157).

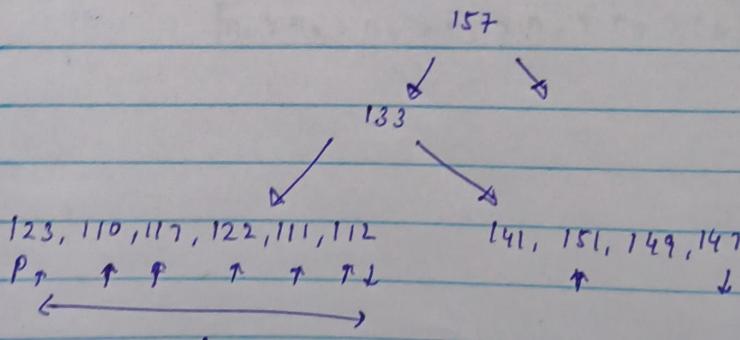
1. 133, 110, 147, 122, 111, 149, 151, 141, 123, 112, 117, 157
P↑ ↑ ↑

2. 133, 110, 117, 122, 111, 149, 151, 141, 123, 112, 147 ↗ 157 ←
P↑ ↑ ↑ ↑ ↑ ↓ ↓

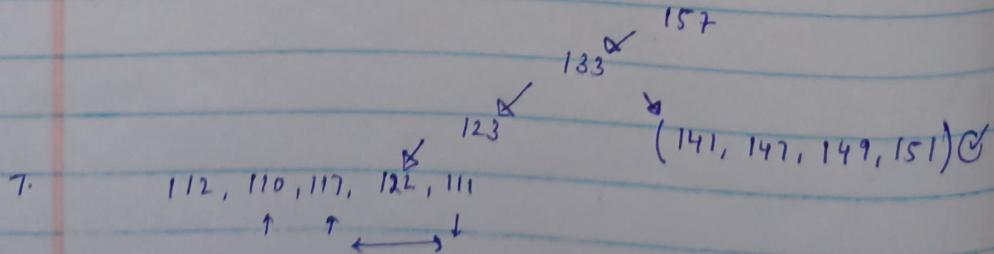
3. 133, 110, 117, 122, 111, 112, 151, 141, 123, 149, 147 ↗ 157 ←
P↑ ↑ ↑ ← ↓ ↓

4. 133, 110, 117, 122, 111, 112, 123, 141, 151, 149, 147 ↗ 157 ←
P↑ ← → ↑ ↓ ↑ ↓ ↓

5.

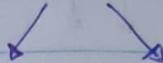


6. 112, 110, 117, 122, 111, 123



8. 112, 110, 111, 122, 117
 ↑↓ ↑↓ ↓

9. 111, 110, 112, 122, 117



10. 111, 110, 122, 117
 ↔↑ ↔
110, 111 117, 122

Final \rightarrow 110, 111, 112, 122, 117, 123, 133, 141, 147, 149, 151, 157

Last pivot (133)

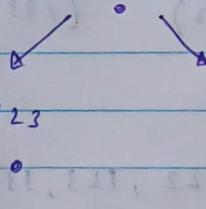
1. 157, 110, 147, 122, 111, 149, 151, 141, 123, 112, 117, 133
 ↑ ↔ ↓ ↑P.

2. 117, 110, 147, 122, 111, 149, 151, 141, 123, 112, 157, 133
 ↑ ↑ ↑ ↔ ↓ ↓ ↑P..

3. 117, 110, 112, 122, 111, 149, 151, 141, 123, 147, 157, 133
 ↑ ↑ ↑ ↑ ↔ ↓ ↓ ↑P.

4. 117, 110, 112, 122, 111, 123, 151, 141, 149, 147, 157, 133
 ↑ ↑ ↓ ↑ ↓ ↓ ↑P.

5. 117, 110, 112, 122, 111, 123, 133, 141, 149, 147, 157, 151



141, 149, 147, 157, 151

↑ ↑ ↑ ↓ ↑
141, 149, 147, 151, 157

6. 117, 110, 112, 122, 111

↓

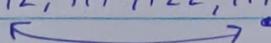
↑ → (157) C

7. 110, 117, 122, 122, 111

•

↑ ↓ ↑
(141, 149, 147) ✓

8. 110, 112, 117, 122, 111



10

9. (110, 111) C
 122, 117
 117, 122.

\rightarrow Final sorted array.

: 110, 111, 112, 117, 122, 123, 133,
141, 147, 149, 151, 157.

Random pivot

1. 157, 110, 147, 122, 111, 149, 151, 141, 123, 112, 117, 133
↑ TP. ↓ ↓

2. 117, 110, 147, 122, 111, 149, 151, 141, 123, 112, 157, 133
↑ ↑ ↑ TP. ↓ ↓

3. 117, 110, 112, 122, 111, 149, 151, 141, 123, 147, 157, 123
↑ ↑ ↑ ↑ ↓P.

4. 117, 110, 112, 122, 111, 123, 151, 141, 149, 147, 157, 133

5. 117, 110, 112, 122, 111 151, 141, 149, 147, 157, 133
↑P. ↓P.

6. 110, 110, 112, 122, 117 133, 141, 149, 147, 157, 151
↑ ↓ ↓P.

7. (110, 111) 122, 117 133, 141, 147, 149, 157, 151
↓ ↑P. ↓

8. (110, 111) (117, 122) (133, 141) 149, 157, 151
 ↑P. ↓
 (149) (151, 157)

Final: 110, 111, 112, 117, 122, 123, 133, 141, 147, 149, 151, 157.