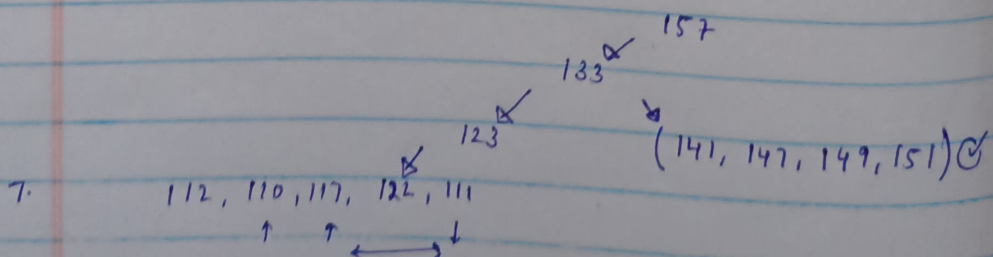
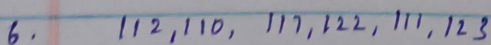


DAA LAB-5

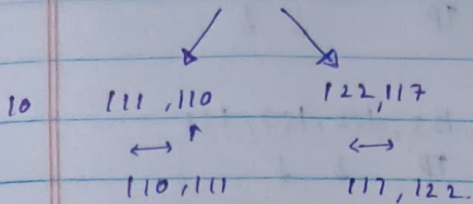
1st \rightarrow pivot. (157)

4. 133, 110, 117, 122, 111, 112, 123, 141, 151, 149, 147 \nwarrow 157
 \uparrow \leftarrow \rightarrow \uparrow \uparrow \downarrow



8. 112, 110, 117, 122, 117
 $\uparrow \downarrow \quad \uparrow \downarrow \quad \downarrow$

9. 111, 110, 112, 122, 117



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
 $\uparrow \leftarrow \hspace{10em} \rightarrow \downarrow$ TP.

2. 117, 110, 147, 122, 111, 149, 151, 141, 123, 112, 157, 133
 $\uparrow \uparrow \uparrow \leftarrow \hspace{10em} \rightarrow \downarrow \downarrow$ TP.

3. 117, 110, 112, 122, 111, 149, 151, 141, 123, 147, 157, 133
 $\uparrow \uparrow \uparrow \uparrow \leftarrow \hspace{10em} \rightarrow \downarrow \downarrow$ TP.

4. 117, 110, 112, 122, 111, 123, 151, 141, 149, 147, 157, 133
 $\uparrow \downarrow \uparrow \downarrow \downarrow$

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

117, 110, 112, 122, 111, 123

$\uparrow \uparrow \uparrow \downarrow \uparrow \circ$
 \downarrow

6. 117, 110, 112, 122, 111

\downarrow

7. 110, 117, 122, 122, 111

\circ

8. 110, 112, 117, 122, 111

$\leftarrow \hspace{10em} \rightarrow \circ$

9. (110, 111) 122, 117

\hookrightarrow

117, 122.

10

\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
TP. ↓ ↓
5. 117, 110, 112, 122, 111 151, 141, 149, 147, 157, 133
TP. ↓ TP.
6. 117, 110, 112, 122, 117 133, 141, 149, 147, 157, 151
↓ TP.
7. (110, 111) 122, 117 133, 141, 147, 149, 157, 151
↓ TP ↓
8. (110, 111) (117, 122) (133, 141) 149, 157, 151
↓ TP ↓
- (149) (157, 151)

Final: 110, 111, ¹¹²117, 122, 123, 133, 141, 147, 149, 151, 157