

1st as pivot

①

157

Pivot

110

147

122, 111

149

151

141

123

112

117

133

2) 133

110

147

122, 111

149

151

141

123

112

117

157

3) 133

110

117

122

111

149

151

141

123

112

147

4) 133

110

117

122

111

112

151

141

123

129

147

5) 123

110

117

122

111

112

141

151

149

147

6) 112

110

117

122

111

123

141

151

149

147

7) 112

110

117

122

111

123

141

151

149

147

8) 112

110

111

122

117

110

111

112

127

123

9) 111

110

112

122

117

133

141

147

149

151

last as pivot

1) 157, 110, 147, 122, 111, 149, 151, 141, 123, 117, 133
↑ ↓

2) 117, 110, 147, 122, 111, 149, 151, 141, 123, 117, 133
↑ ↑ ↑ ↓ ↓

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

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

5) 117, 110, 112, 122, 111, 123, 133, 141, 149, 147, 157, 151
↓ ↑ ↓

117, 110, 112, 122, 111, 123
↑ ↑ ↑ ↑ ↑ ↓

141, 149, 147, 157, 151

6) 117, 110, 112, 122, 111

141, 149, 147, 157

7) 110, 117, 112, 122, 111

141, 147, 141, 157

8) 110, 112, 117, 122, 111
↑

9) 110, 111, 112, 122, 117

110, 111, 122, 117

117, 122

Sorted = 110, 111, 112, 117, 122, 133, 141, 147, 149, 157, 151

1.

↑ ↑ ↑ ↗ ↓ ↓

↑ ↑ ↑ ↑ ↑

↑

10, 11, 12

117, 122

5

—
^

149, 157, 151

- 149, 151, 152

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