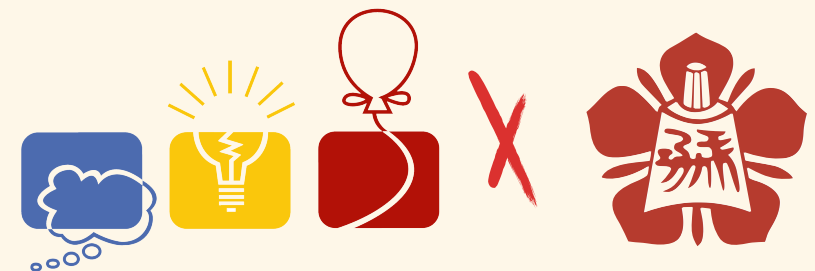


# Selection Sort

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**Latest update: Mar 4, 2013**

# The original sequence.

5	2	7	1	1	6	3
1	2	3	4	5	6	7

5	2	7	1	1	6	3
1	2	3	4	5	6	7

Set original sequence is unsorted  
part.

5	2	7	1	1	6	3
1	2	3	4	5	6	7

5	2	7	1	1	6	3
1	2	3	4	5	6	7

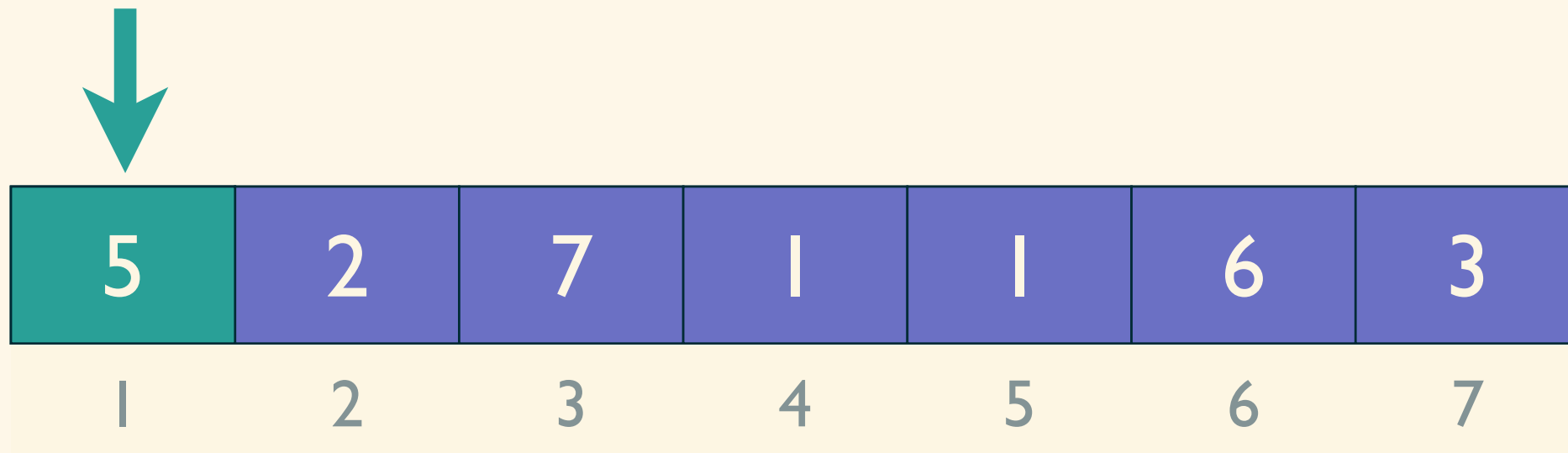
# Find minimum element in unsorted part.

5	2	7	1	1	6	3
1	2	3	4	5	6	7

**Minimum:**

**Position:**

# Find minimum element in unsorted part.

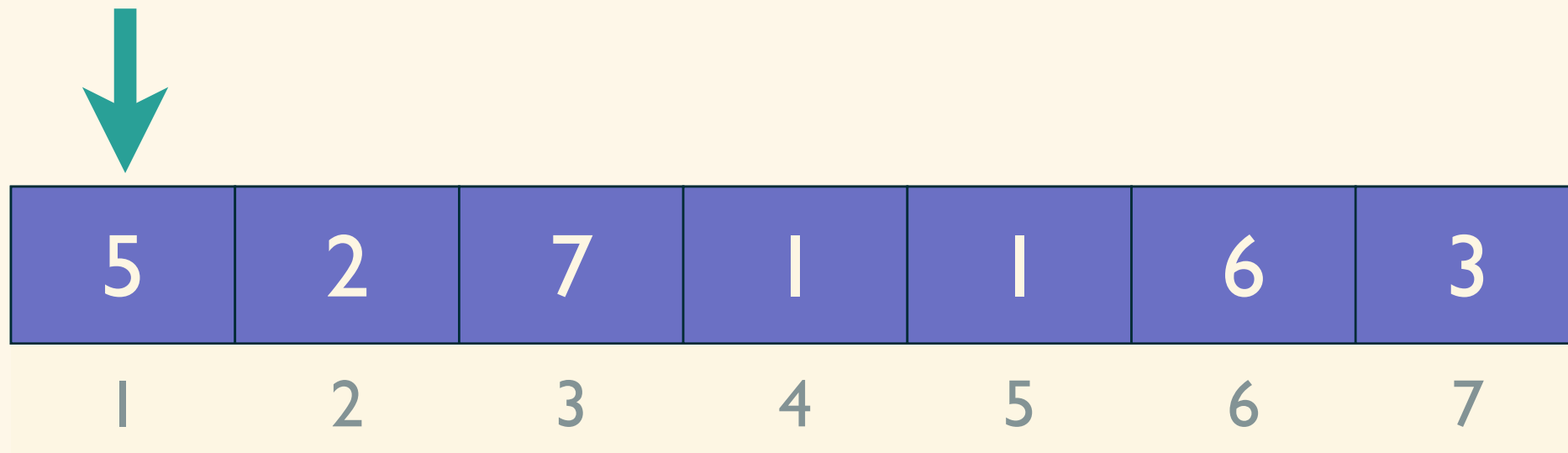


Minimum:

Position:



# Find minimum element in unsorted part.



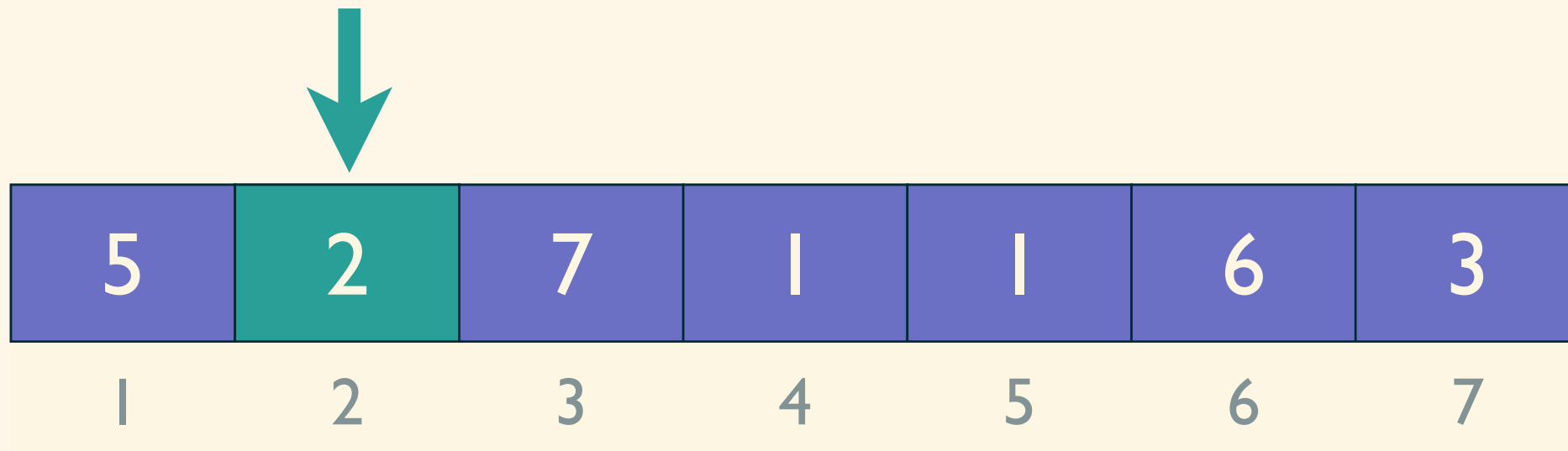
Minimum:

5

Position:

1

# Find minimum element in unsorted part.



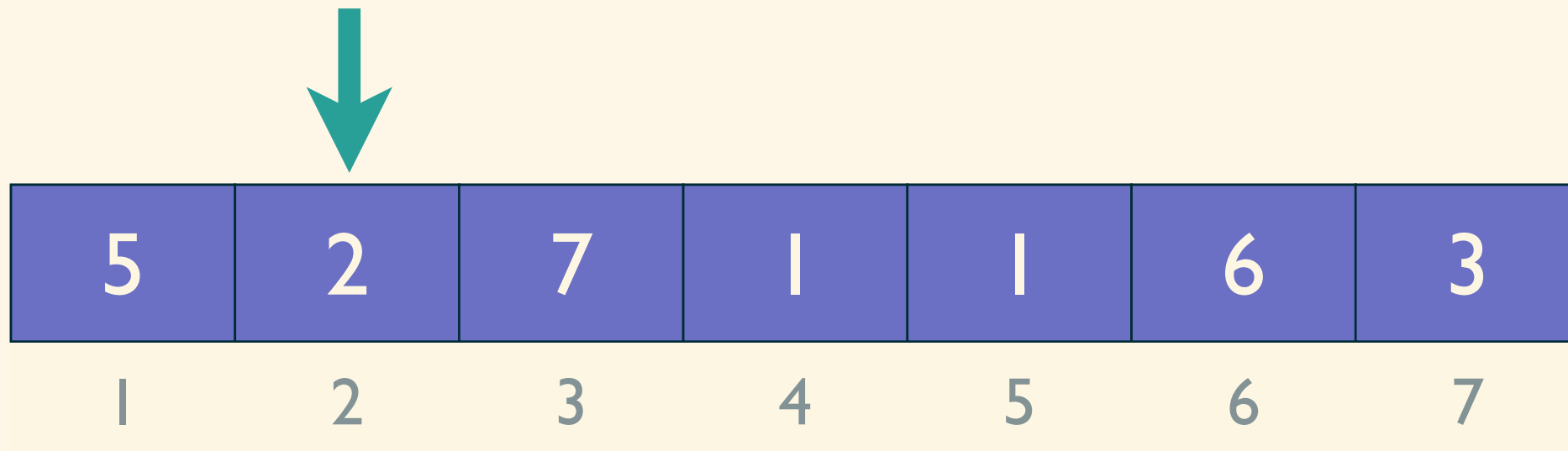
Minimum:

5

Position:

1

# Find minimum element in unsorted part.



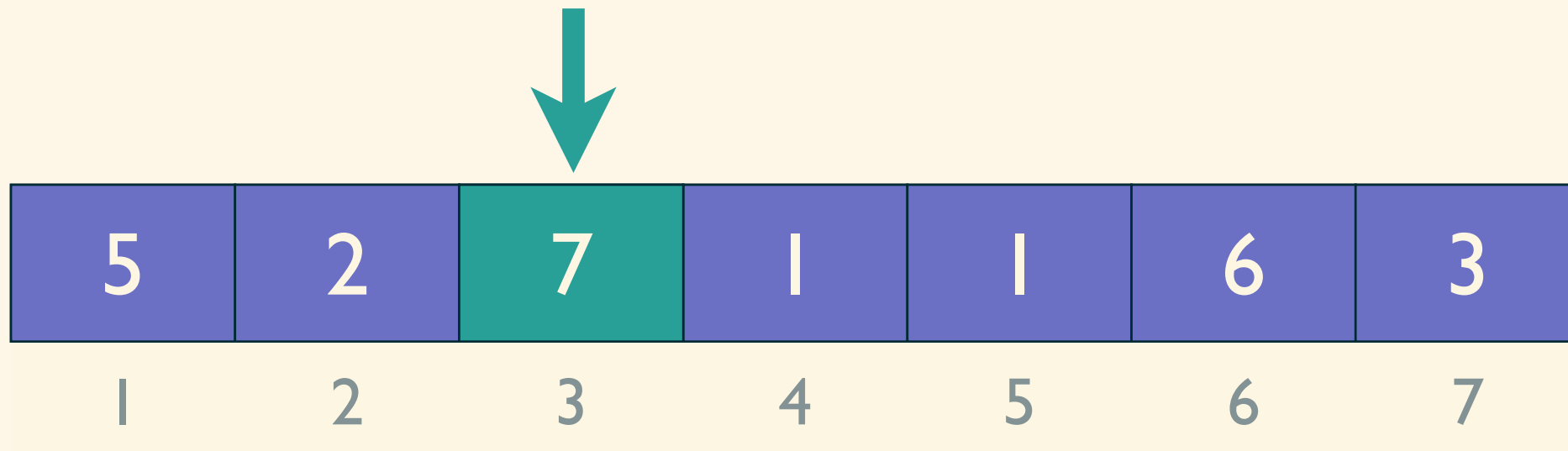
Minimum:

2

Position:

2

# Find minimum element in unsorted part.



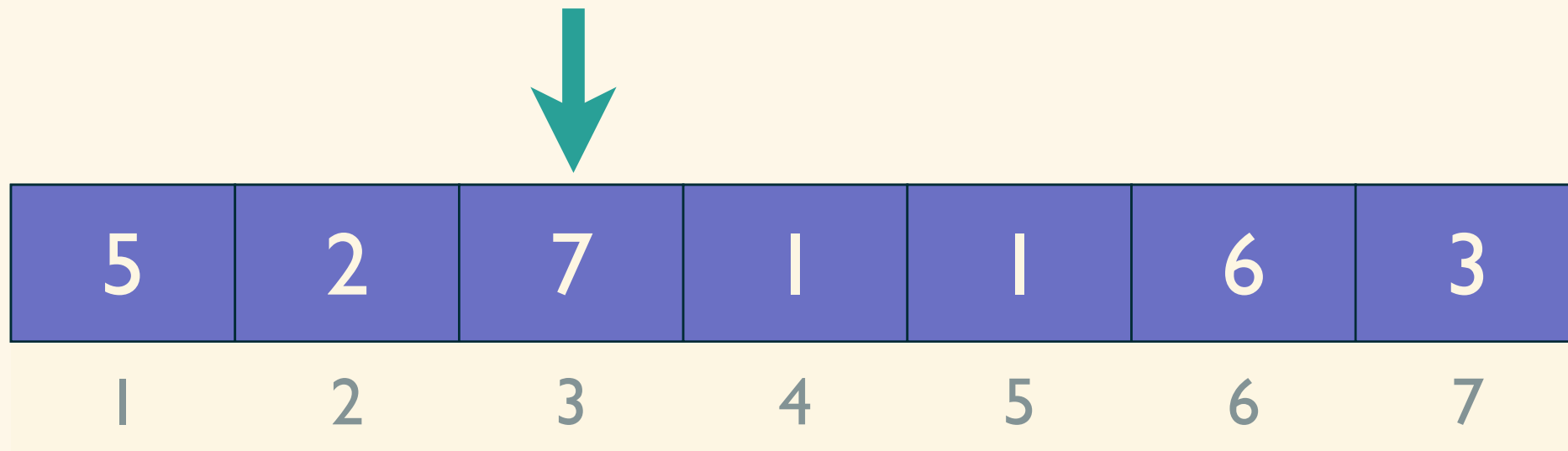
Minimum:

2

Position:

2

# Find minimum element in unsorted part.



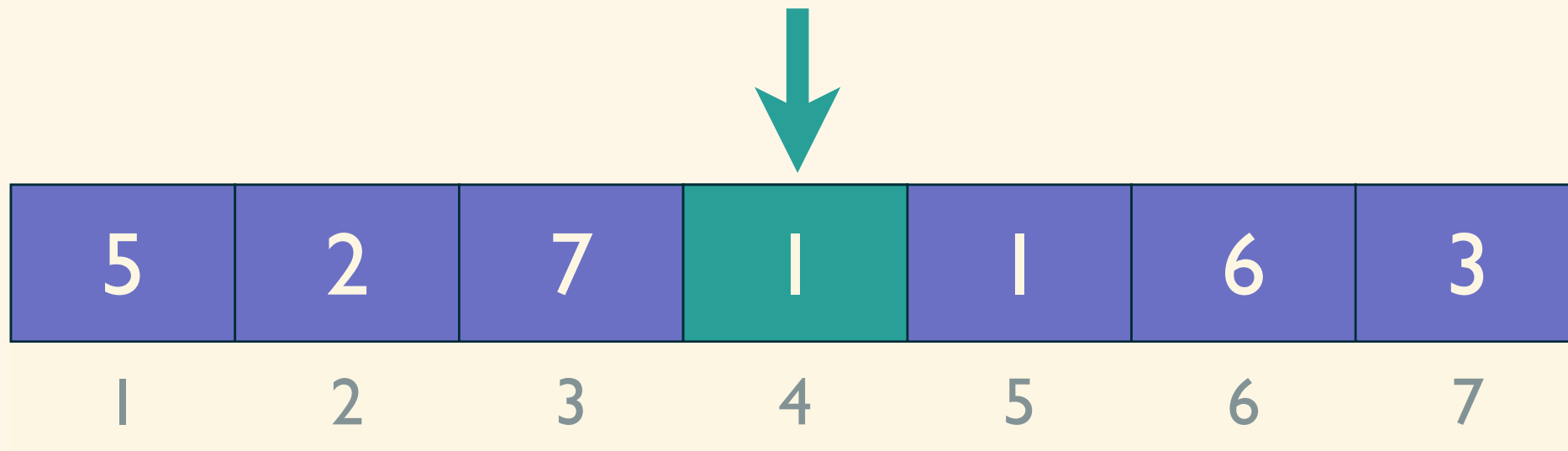
Minimum:

2

Position:

2

# Find minimum element in unsorted part.



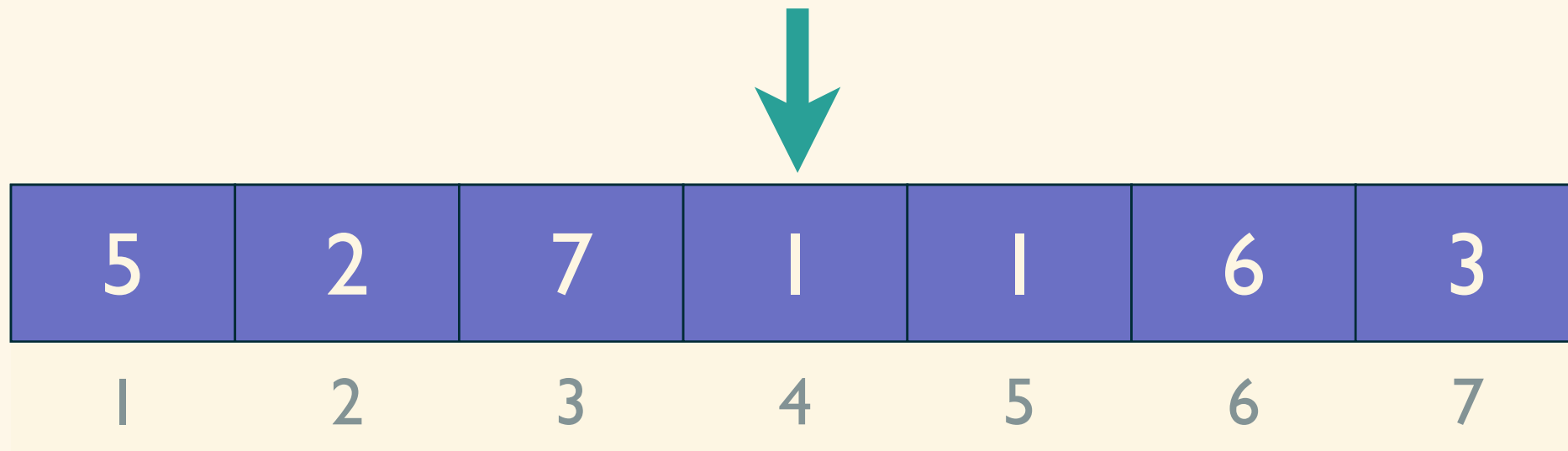
Minimum:

2

Position:

2

# Find minimum element in unsorted part.



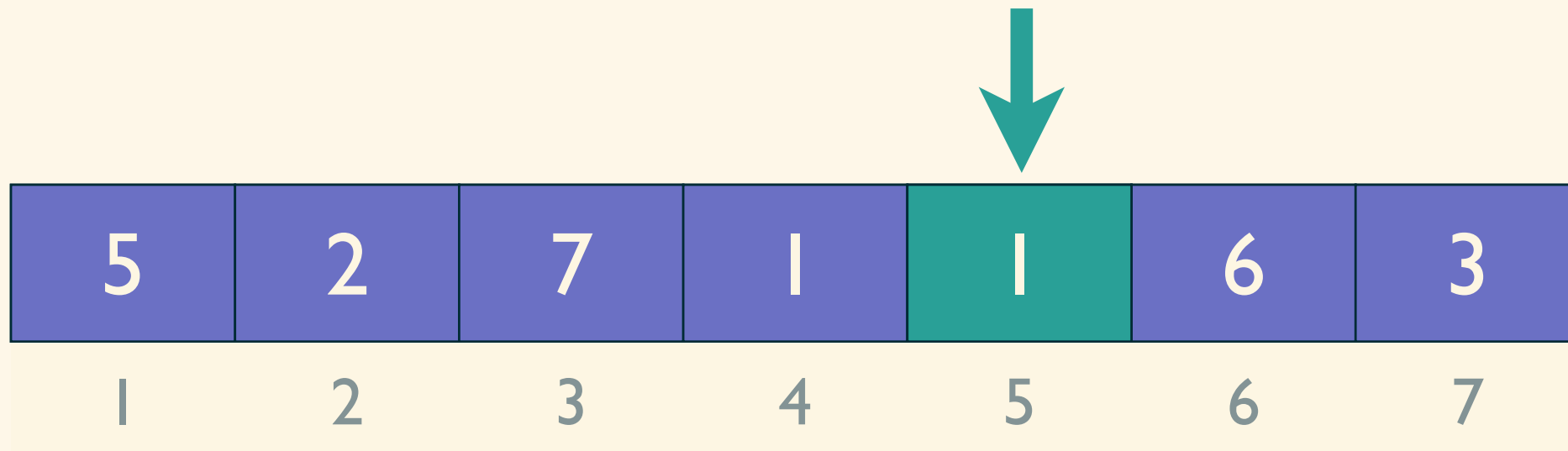
Minimum:



Position:

4

# Find minimum element in unsorted part.



Minimum:

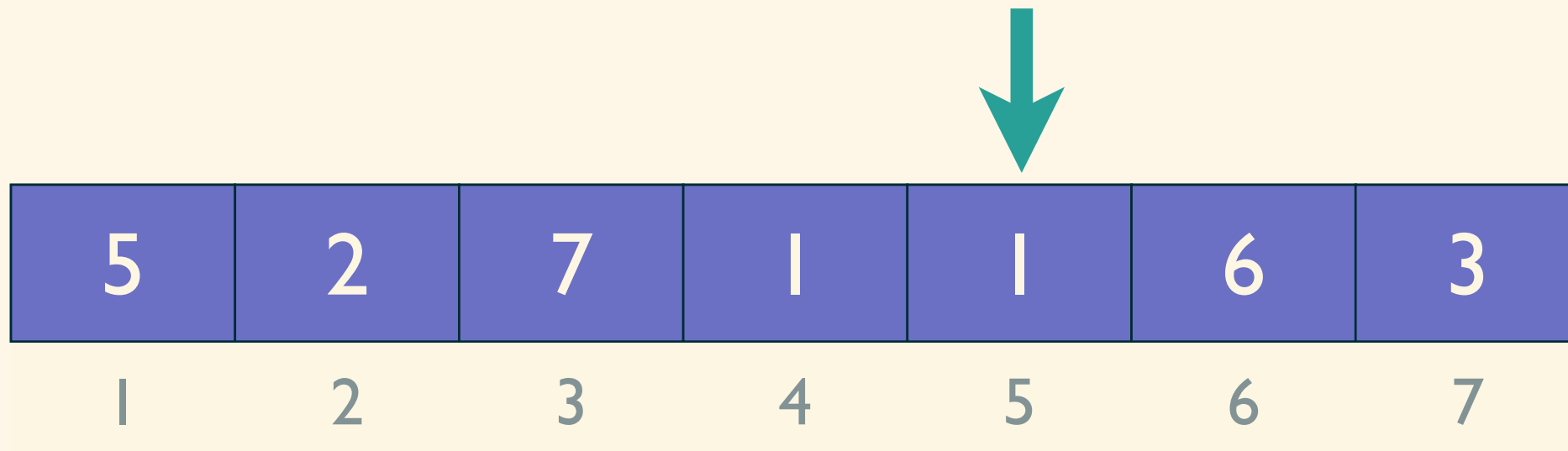


Position:

4



# Find minimum element in unsorted part.



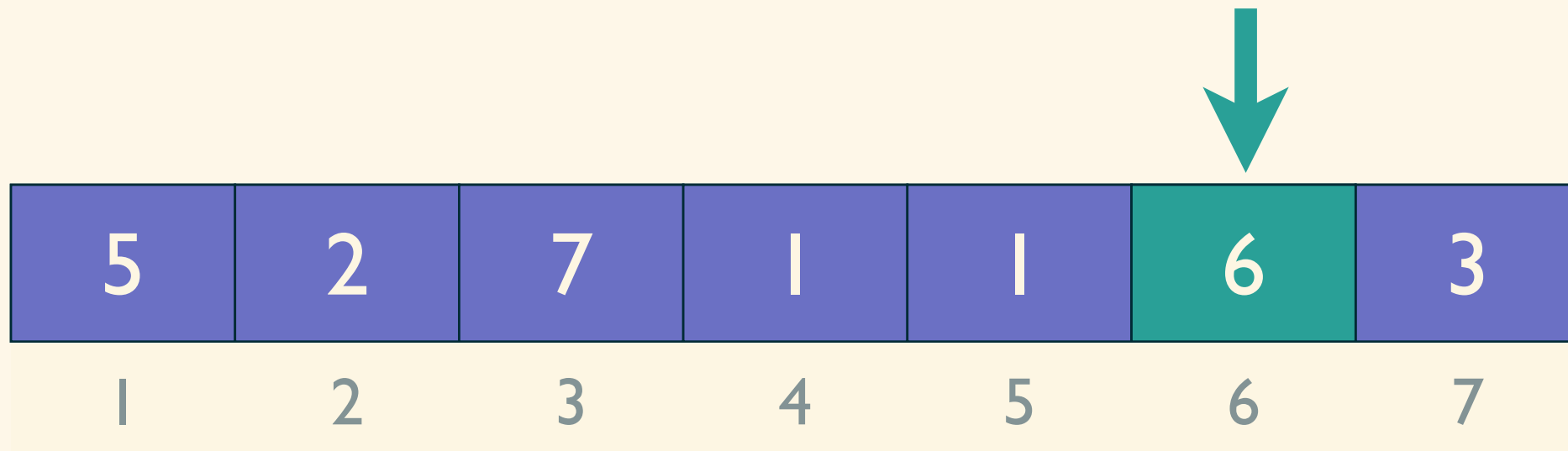
Minimum:

1

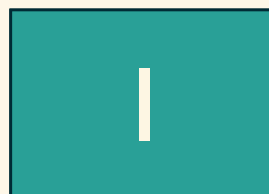
Position:

4

# Find minimum element in unsorted part.



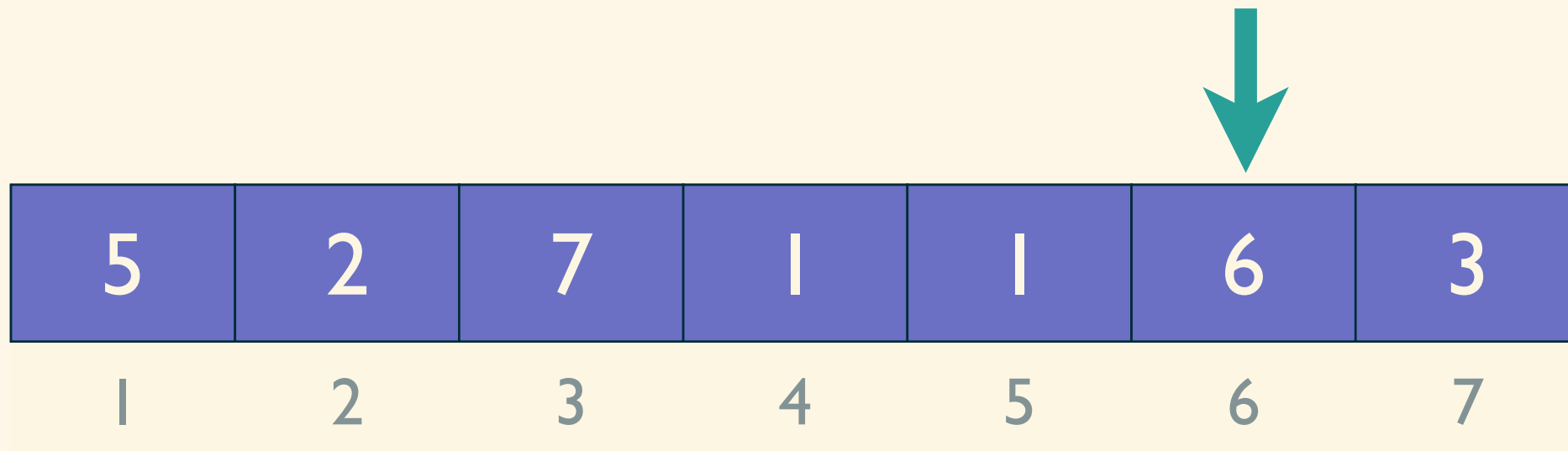
Minimum:



Position:

4

# Find minimum element in unsorted part.



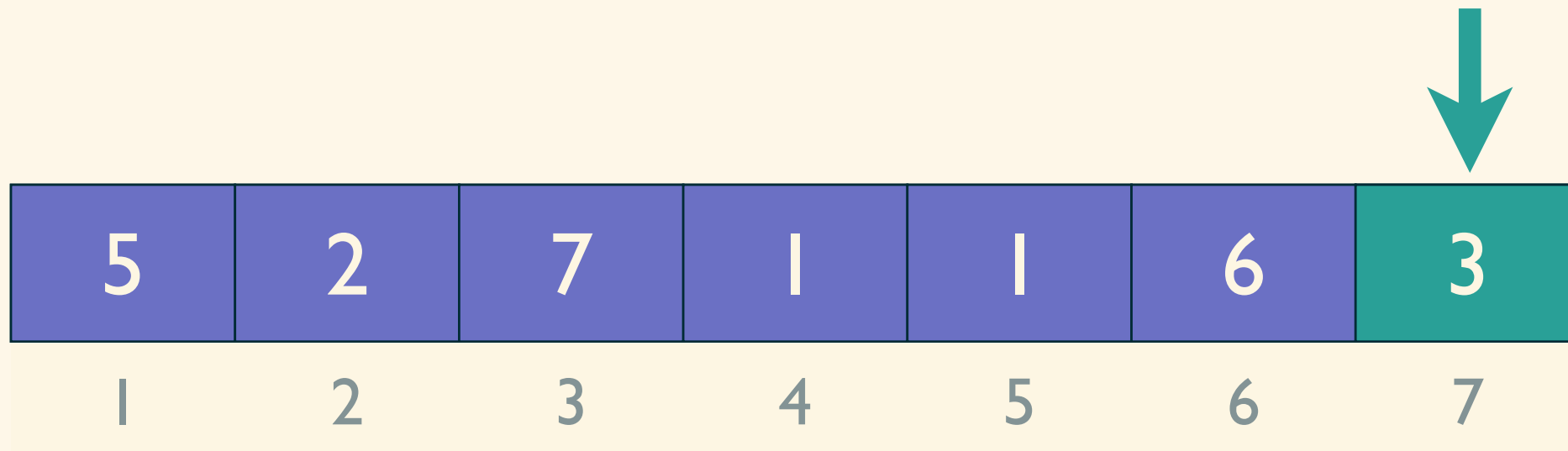
Minimum:

1

Position:

4

# Find minimum element in unsorted part.



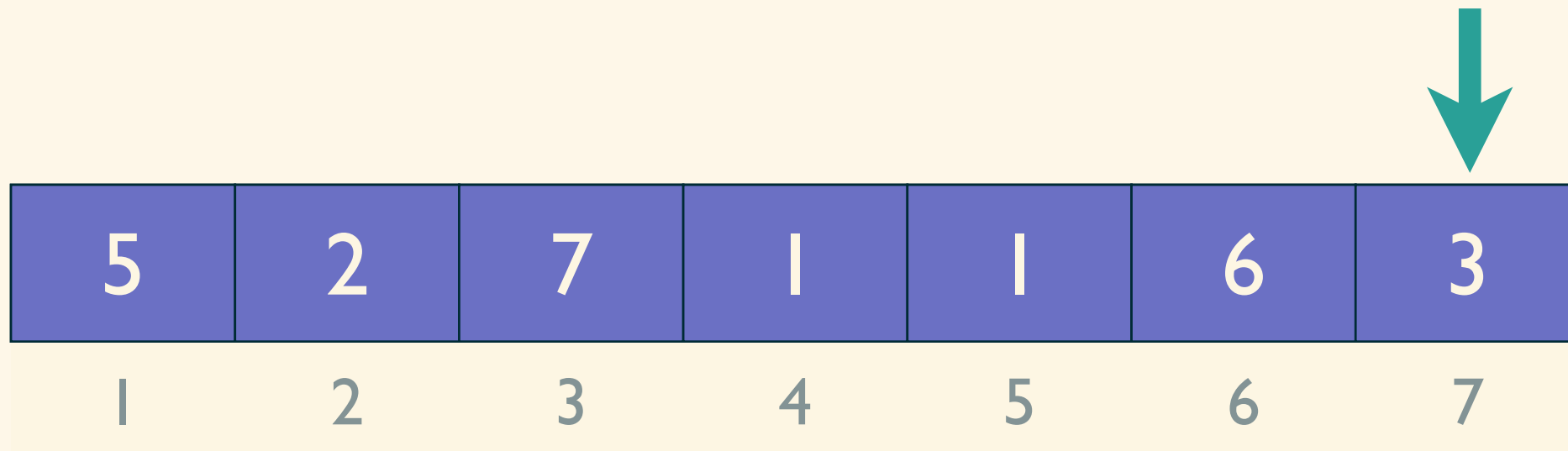
Minimum:



Position:

4

# Find minimum element in unsorted part.



Minimum:



Position:

4

5	2	7	1	1	6	3
1	2	3	4	5	6	7

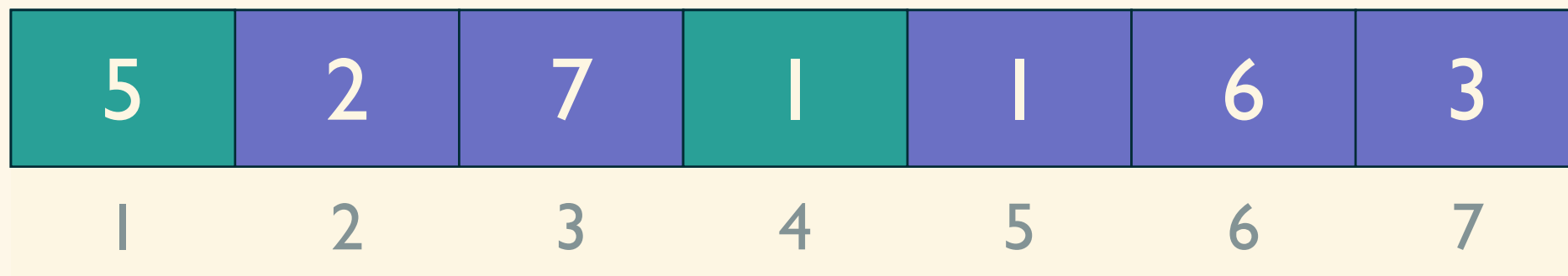
Minimum:

1
---

Position:

4
---

# Swap element back of sorted part and the minimum element.



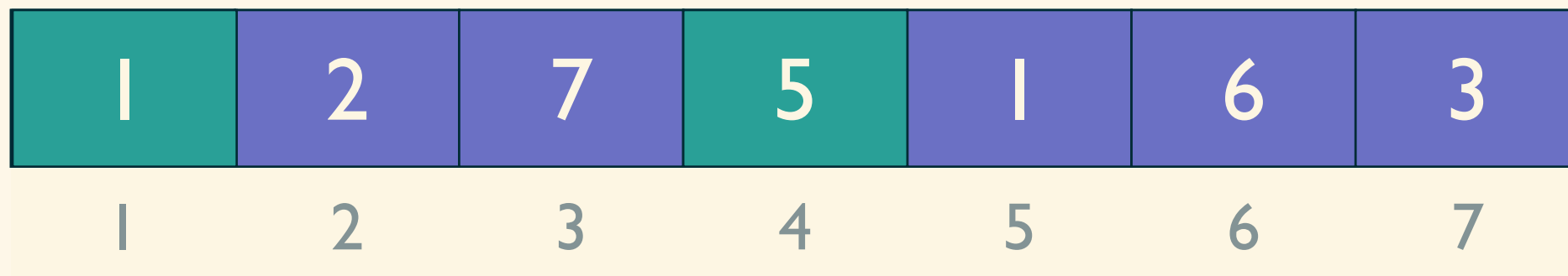
Minimum:



Position:

4

# Swap element back of sorted part and the minimum element.



Minimum:

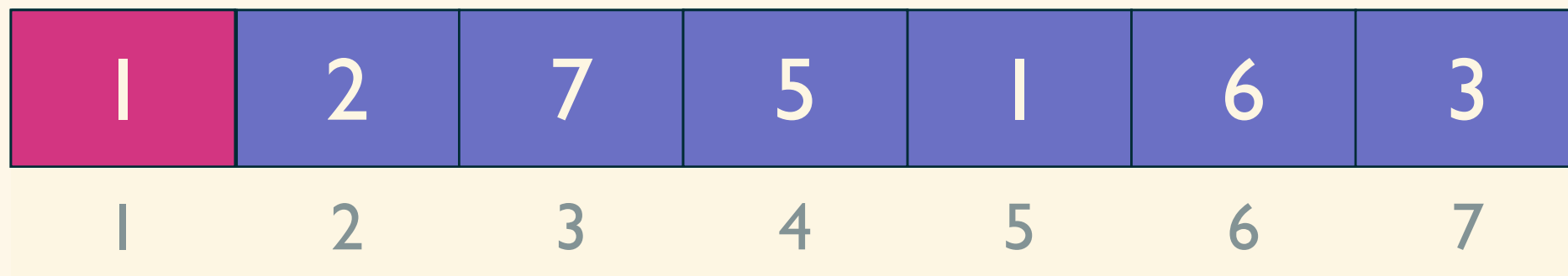


Position:

4



# Swap element back of sorted part and the minimum element.



Minimum:



Position:

4

1	2	7	5	1	6	3
1	2	3	4	5	6	7

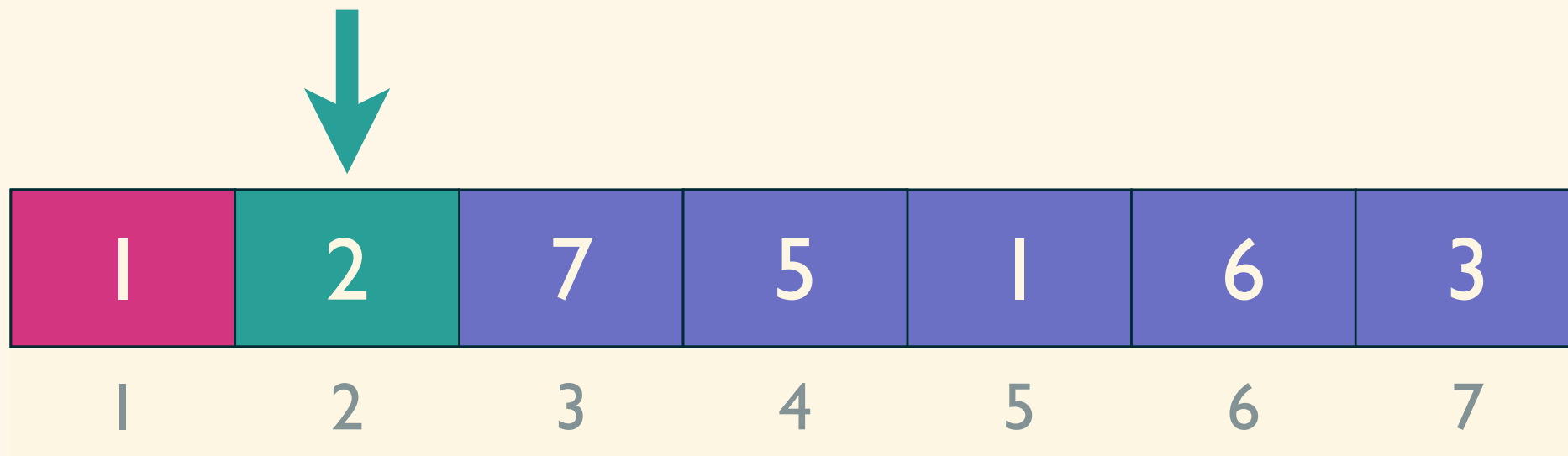
# Find minimum element in unsorted part.

1	2	7	5	1	6	3
1	2	3	4	5	6	7

Minimum:

Position:

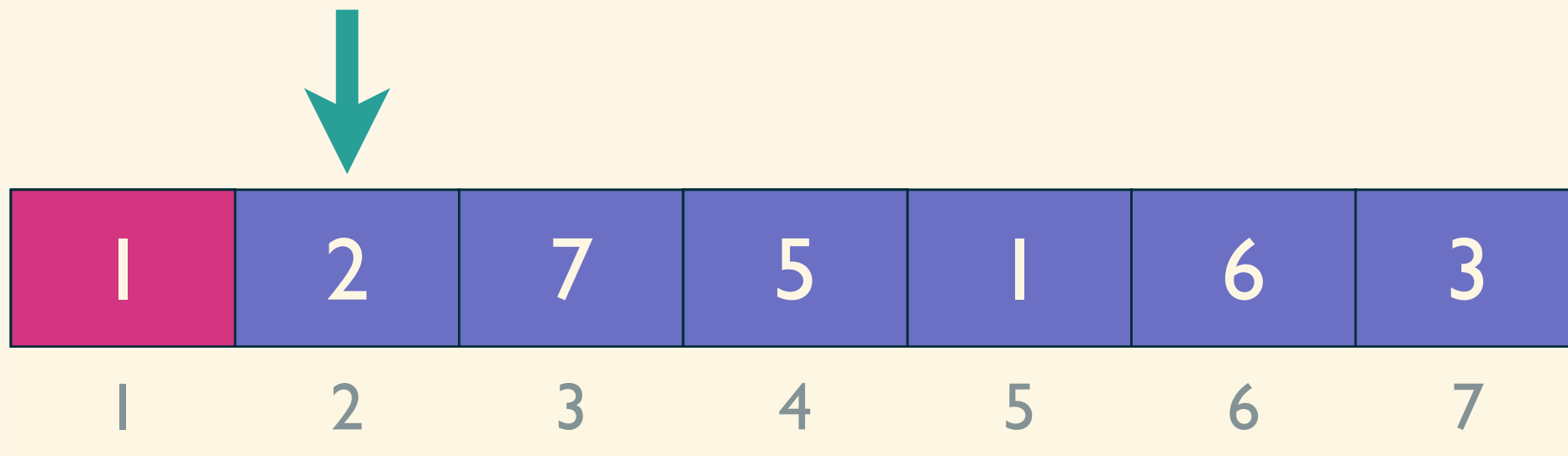
# Find minimum element in unsorted part.



Minimum:

Position:

# Find minimum element in unsorted part.



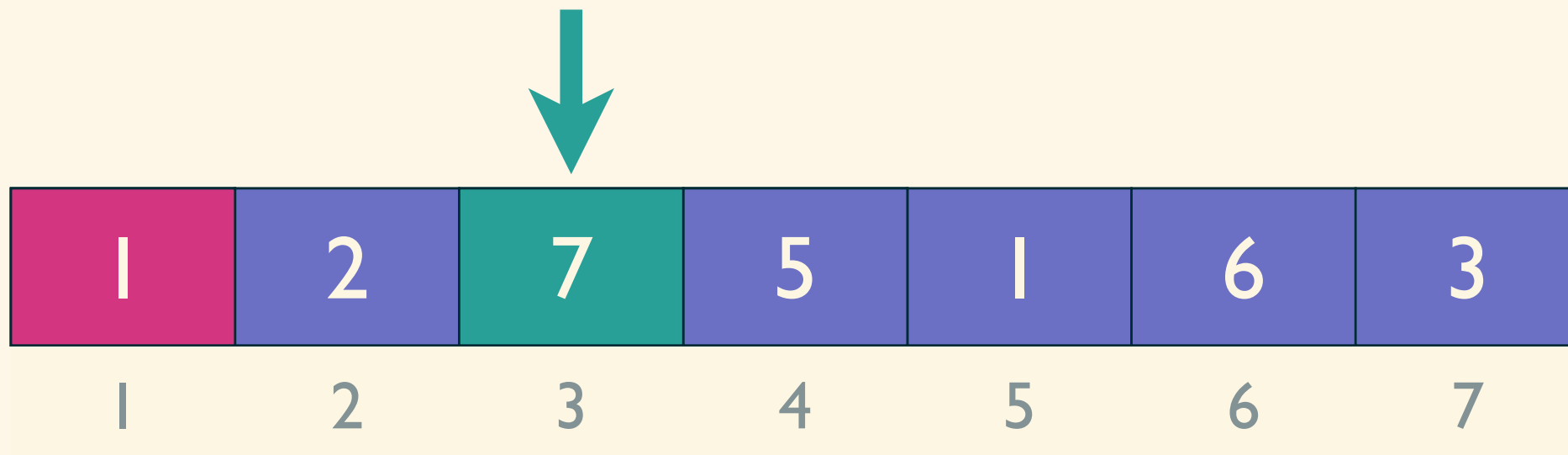
Minimum:

2

Position:

2

# Find minimum element in unsorted part.



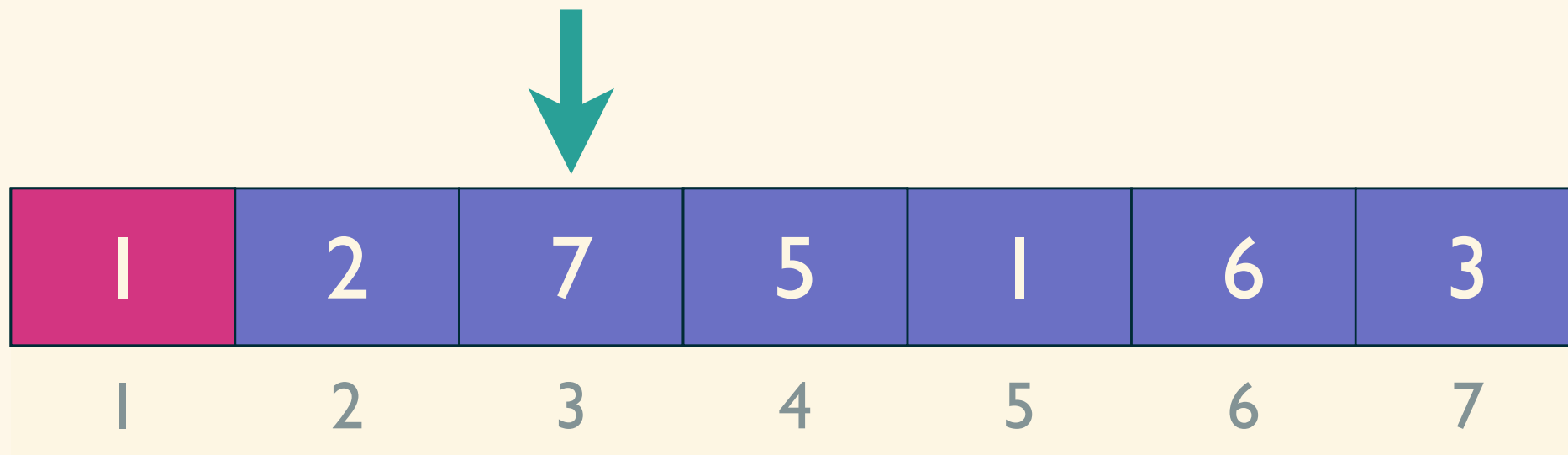
Minimum:

2

Position:

2

# Find minimum element in unsorted part.



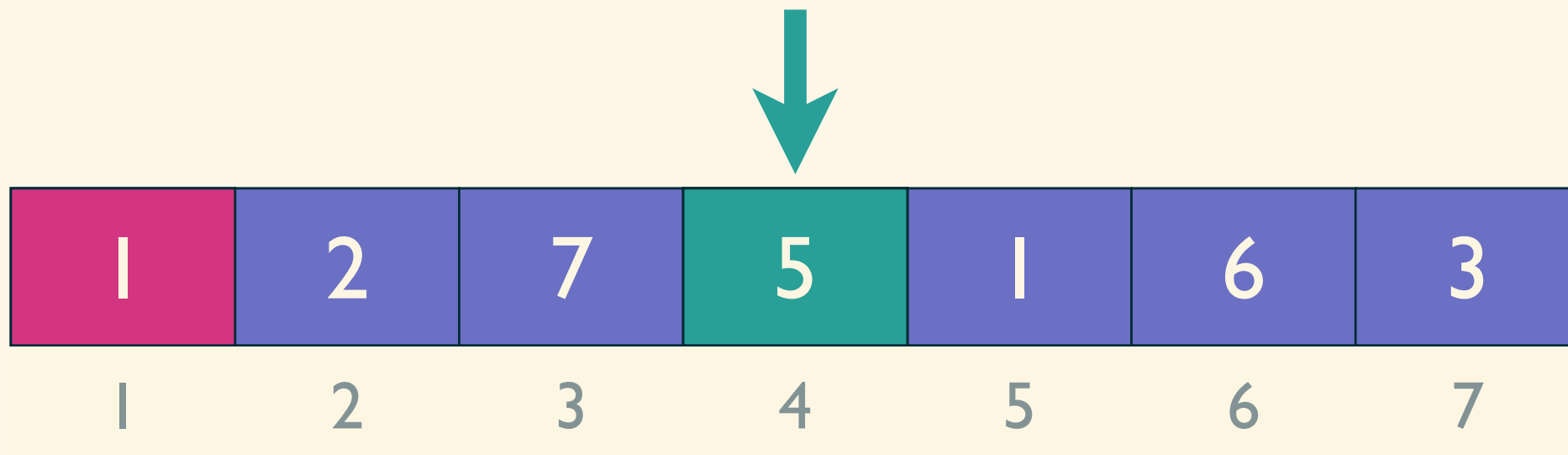
Minimum:

2

Position:

2

# Find minimum element in unsorted part.



Minimum:

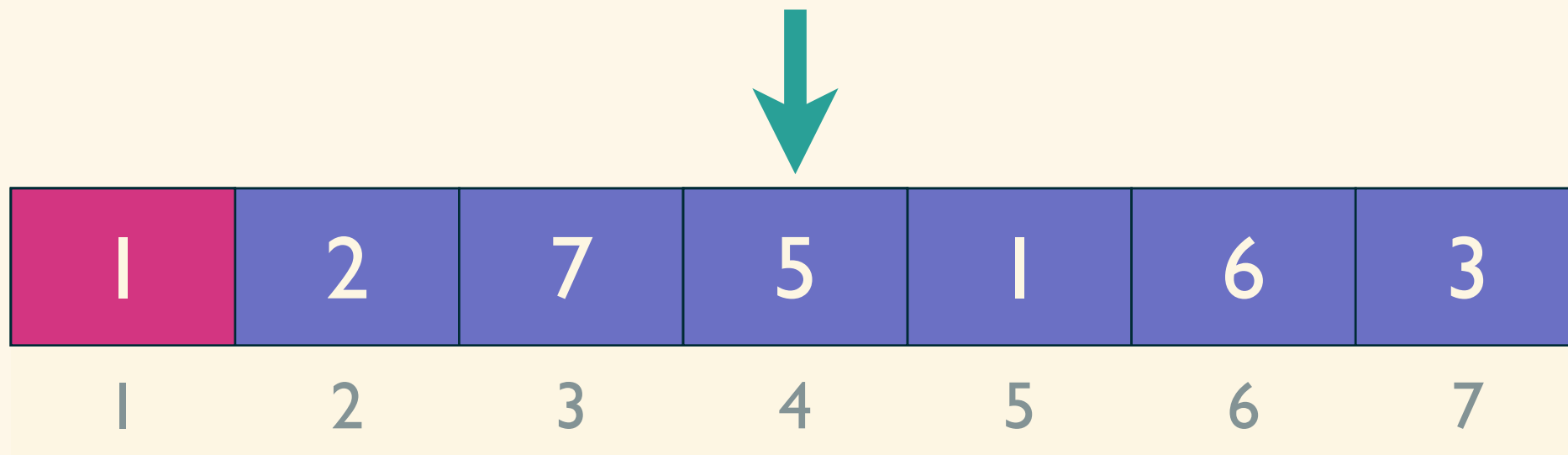
2

Position:

2



# Find minimum element in unsorted part.



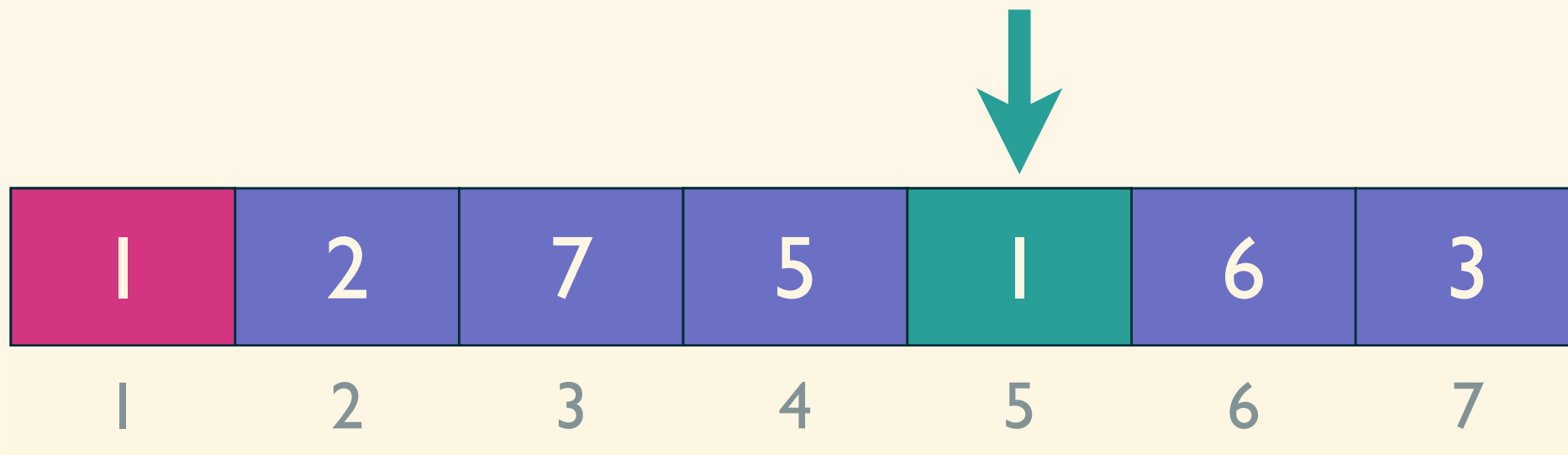
Minimum:

2

Position:

2

# Find minimum element in unsorted part.



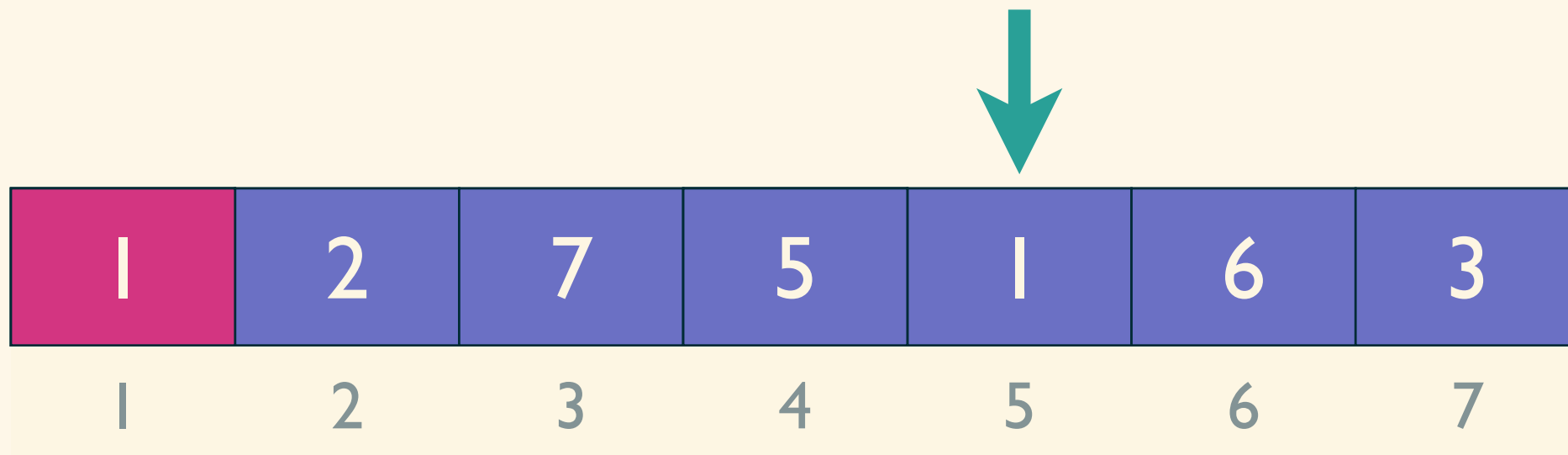
Minimum:

2

Position:

2

# Find minimum element in unsorted part.



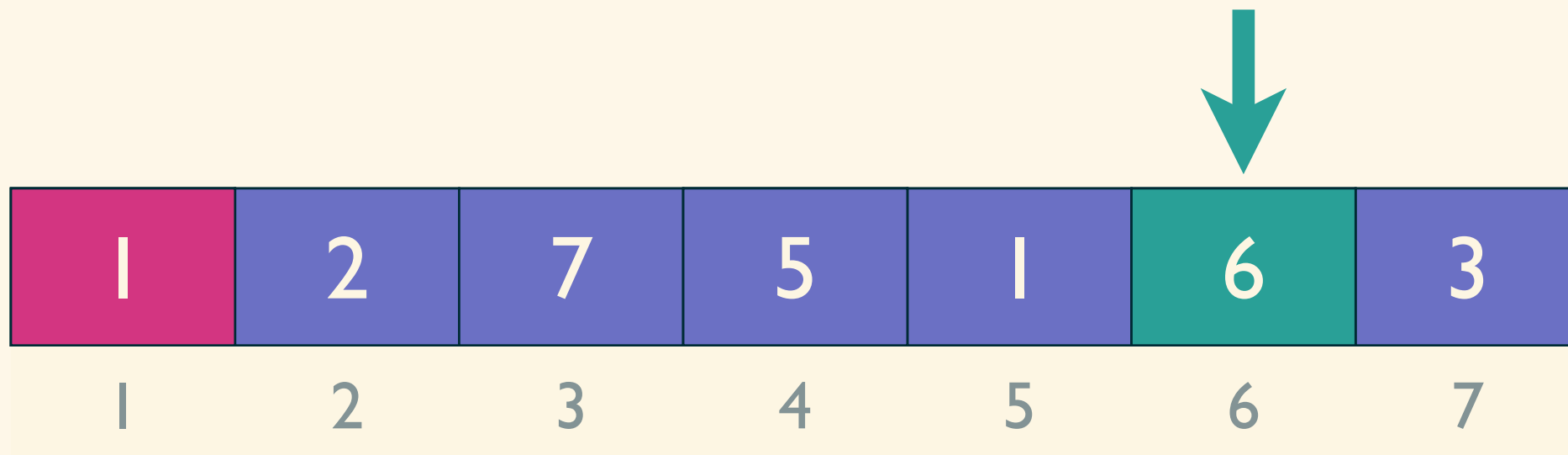
Minimum:



Position:

5

# Find minimum element in unsorted part.



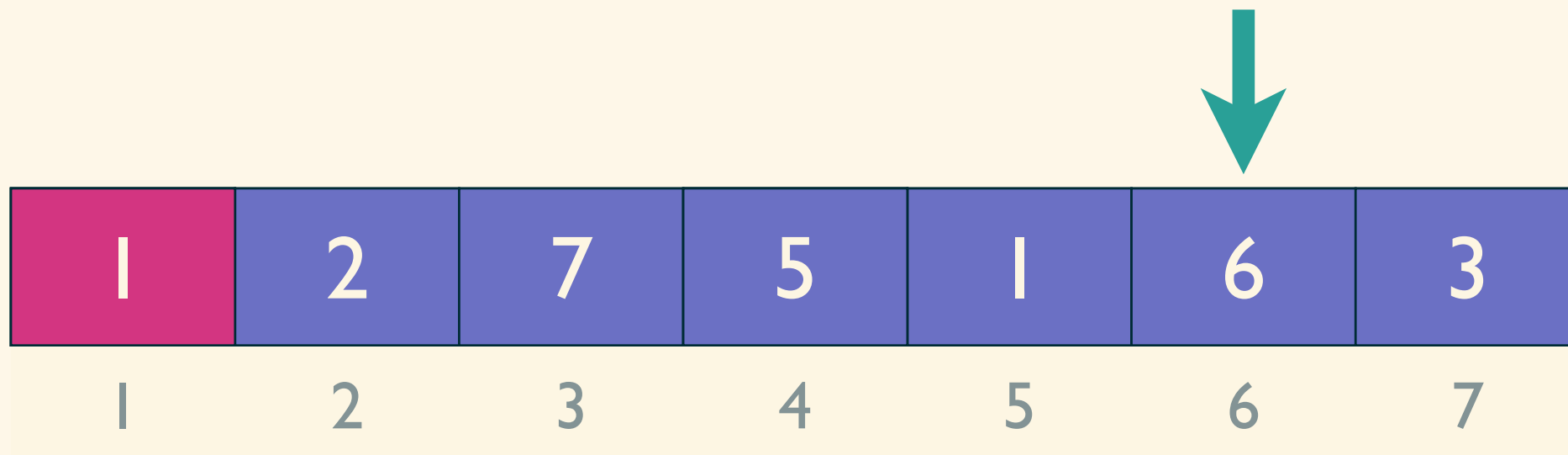
Minimum:



Position:

5

# Find minimum element in unsorted part.



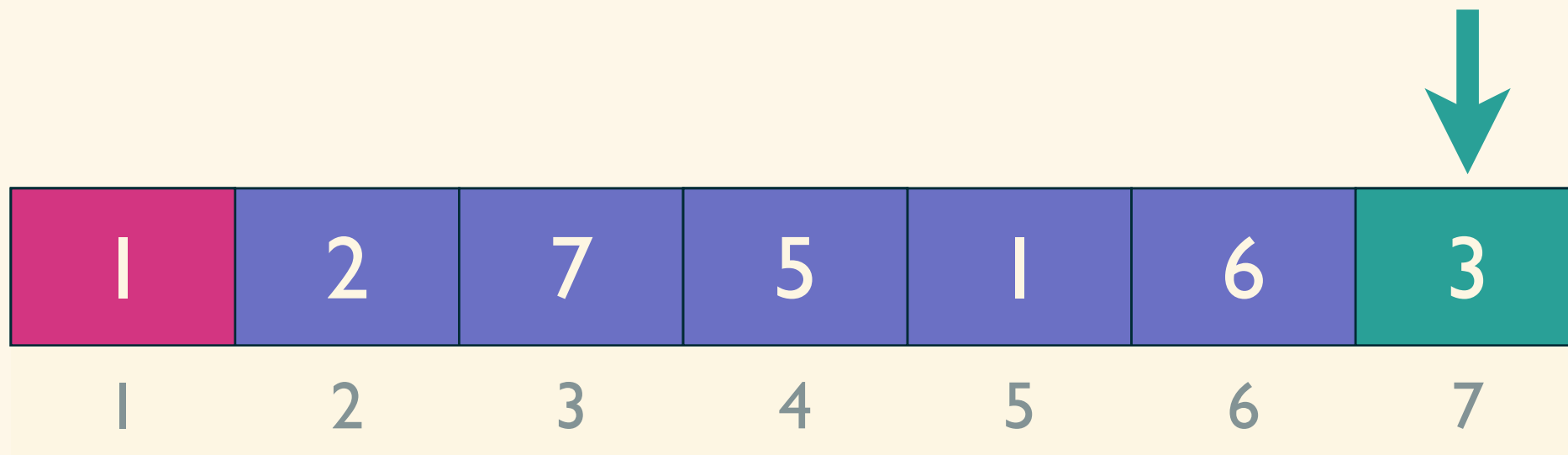
Minimum:



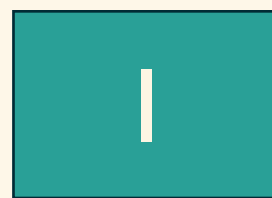
Position:

5

# Find minimum element in unsorted part.



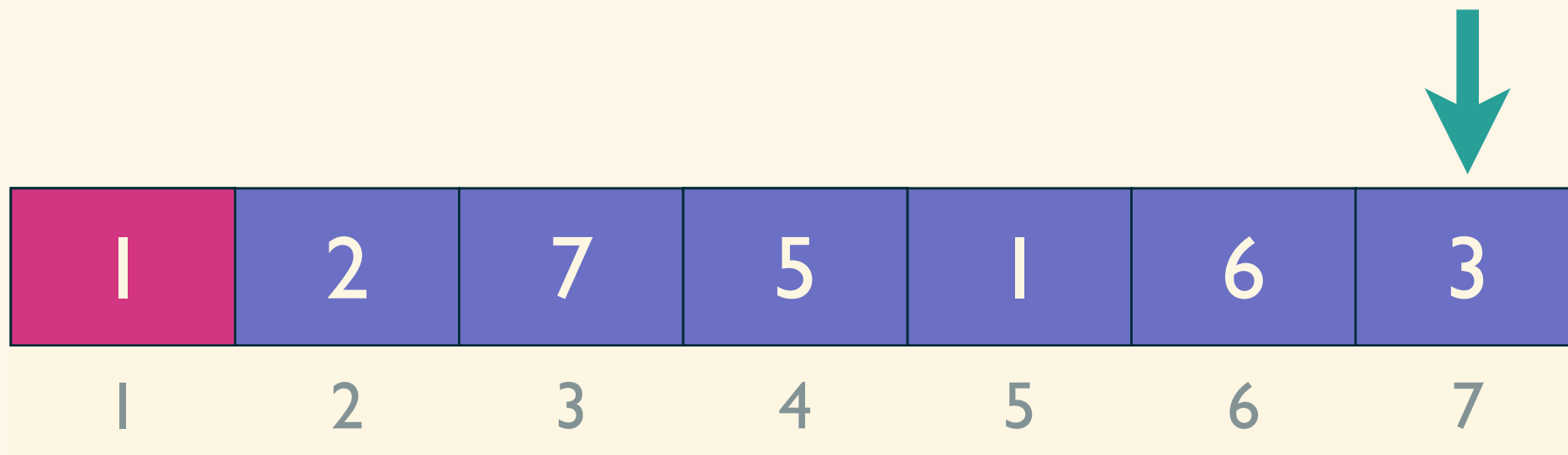
Minimum:



Position:

5

# Find minimum element in unsorted part.

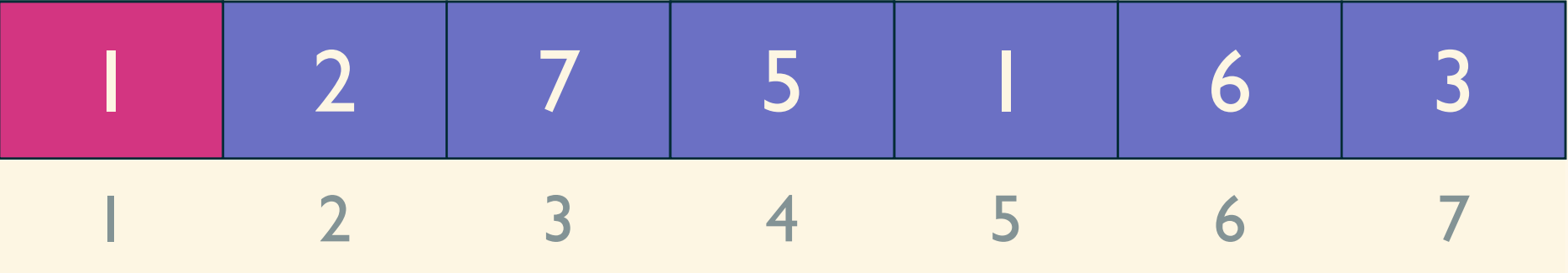


Minimum:

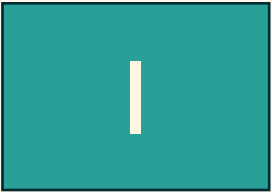
1

Position:

5



Minimum:

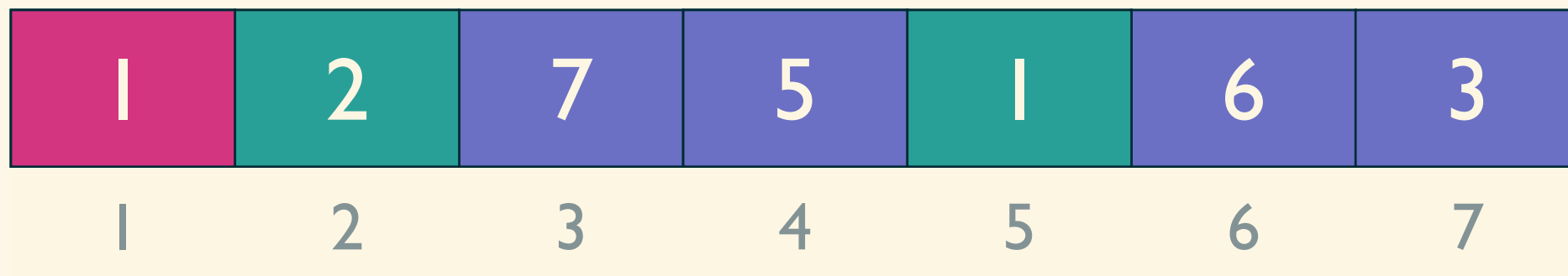


Position:





# Swap element back of sorted part and the minimum element.



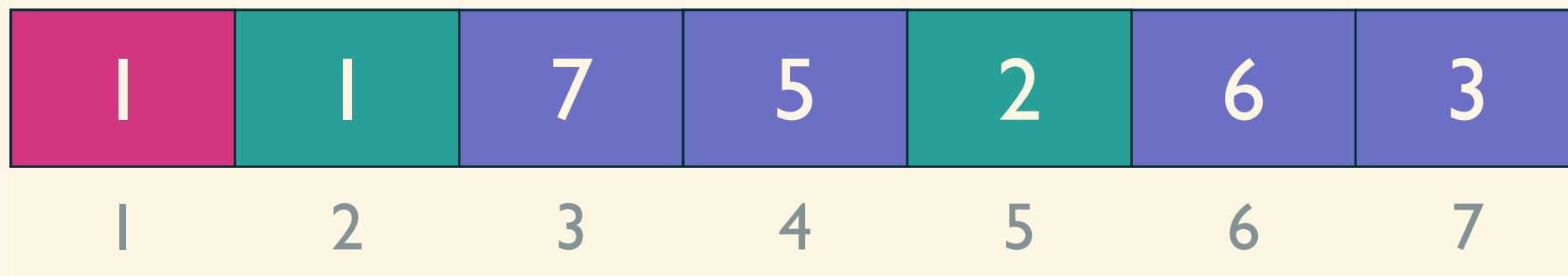
Minimum:



Position:

5

# Swap element back of sorted part and the minimum element.



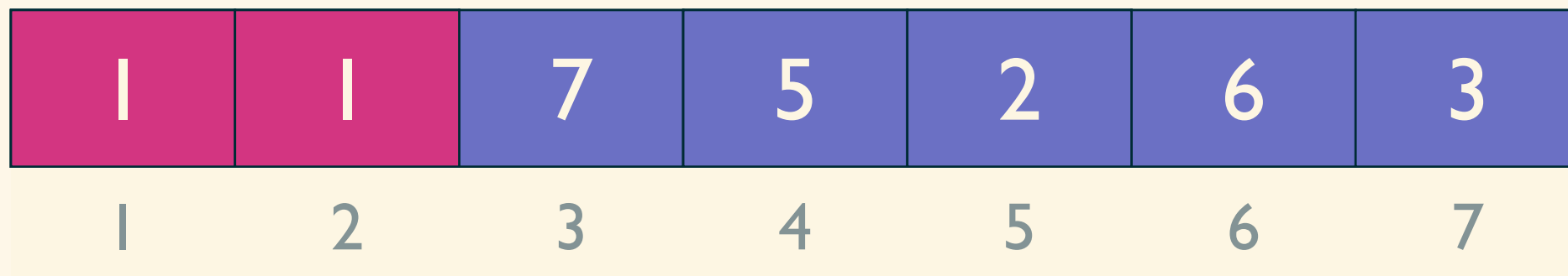
Minimum:



Position:

5

# Swap element back of sorted part and the minimum element.



Minimum:



Position:

5

1	1	7	5	2	6	3
1	2	3	4	5	6	7

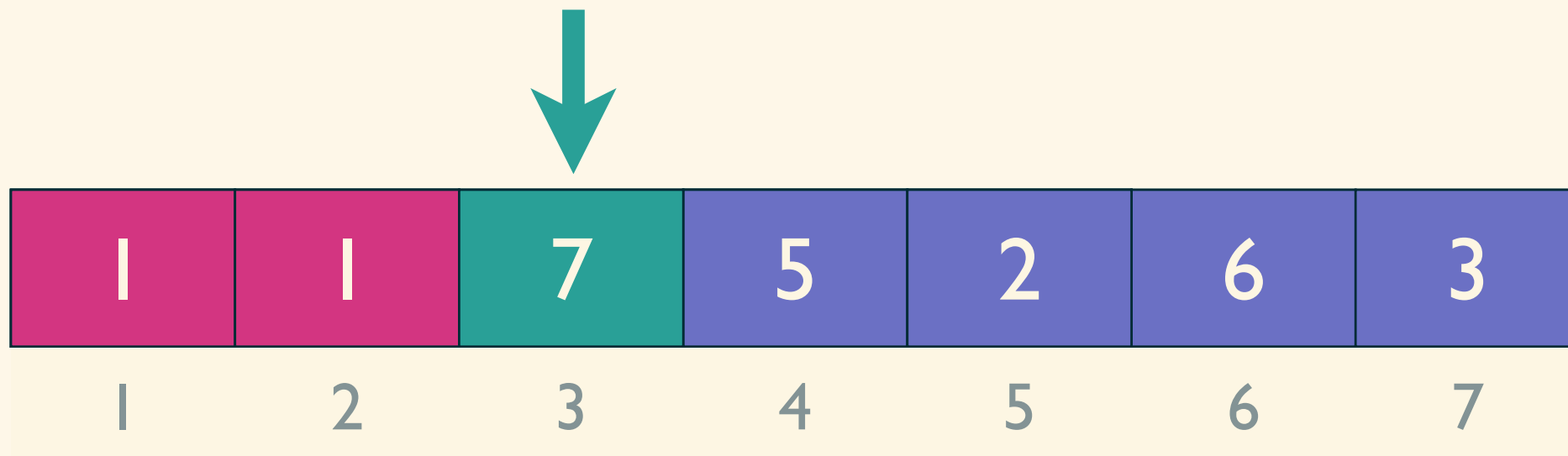
# Find minimum element in unsorted part.

1	1	7	5	2	6	3
1	2	3	4	5	6	7

Minimum:

Position:

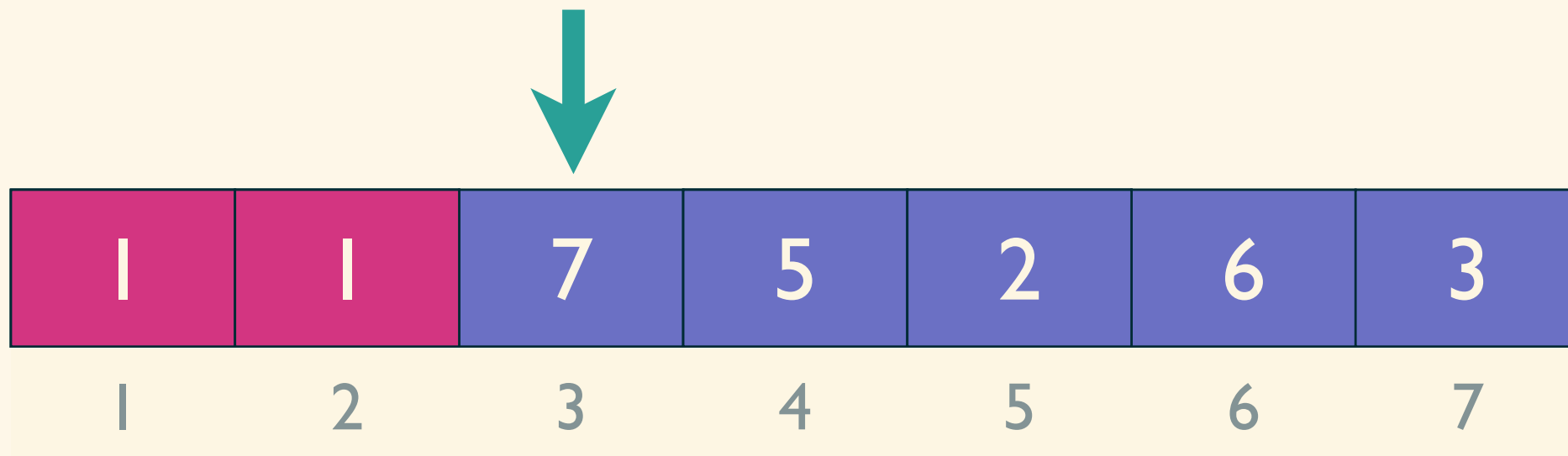
# Find minimum element in unsorted part.



Minimum:

Position:

# Find minimum element in unsorted part.



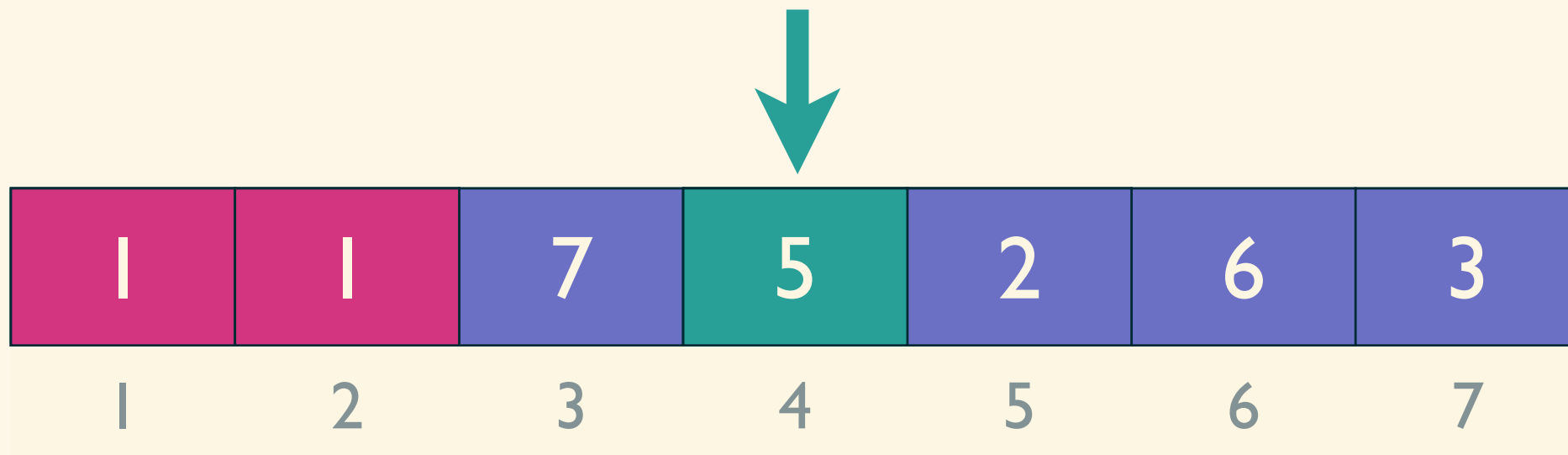
Minimum:

7

Position:

3

# Find minimum element in unsorted part.



Minimum:

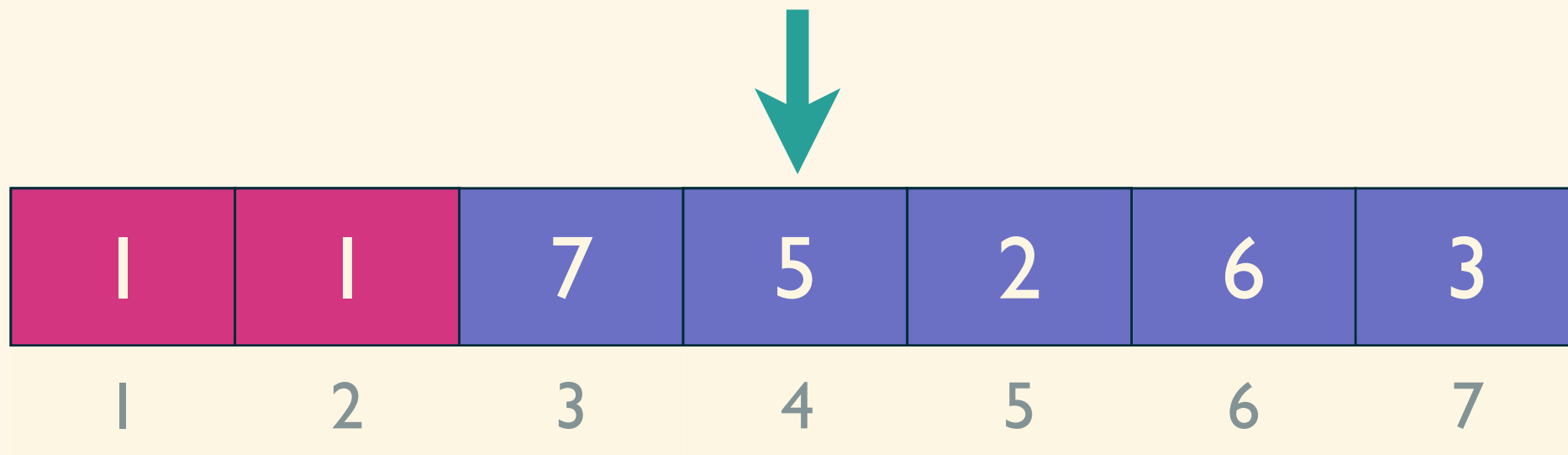
7

Position:

3



# Find minimum element in unsorted part.



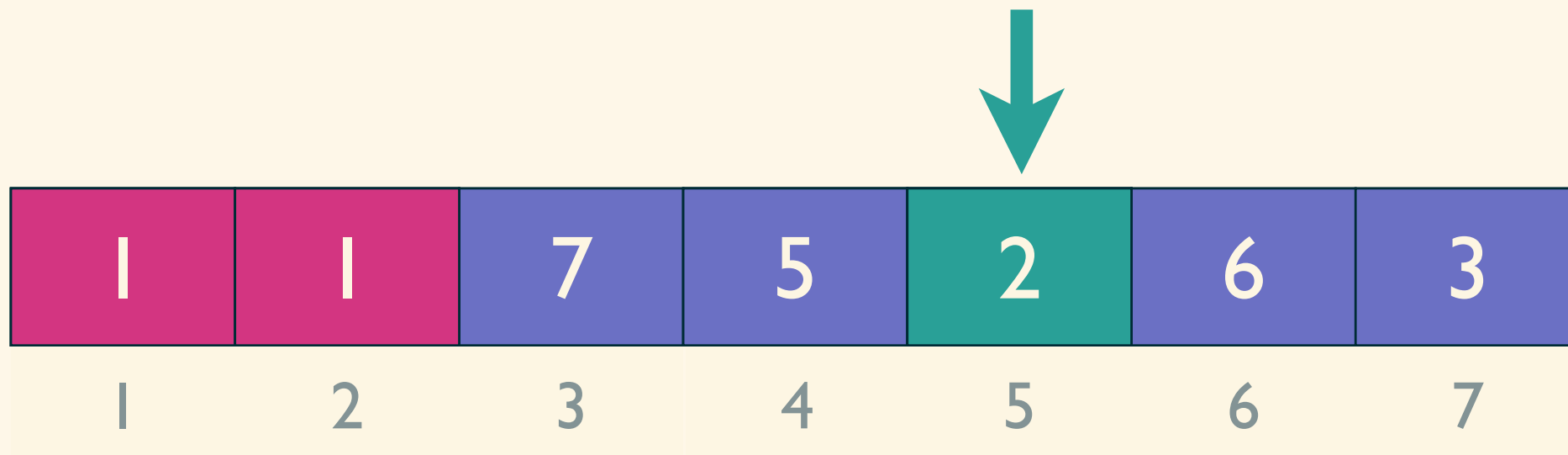
Minimum:

5

Position:

4

# Find minimum element in unsorted part.



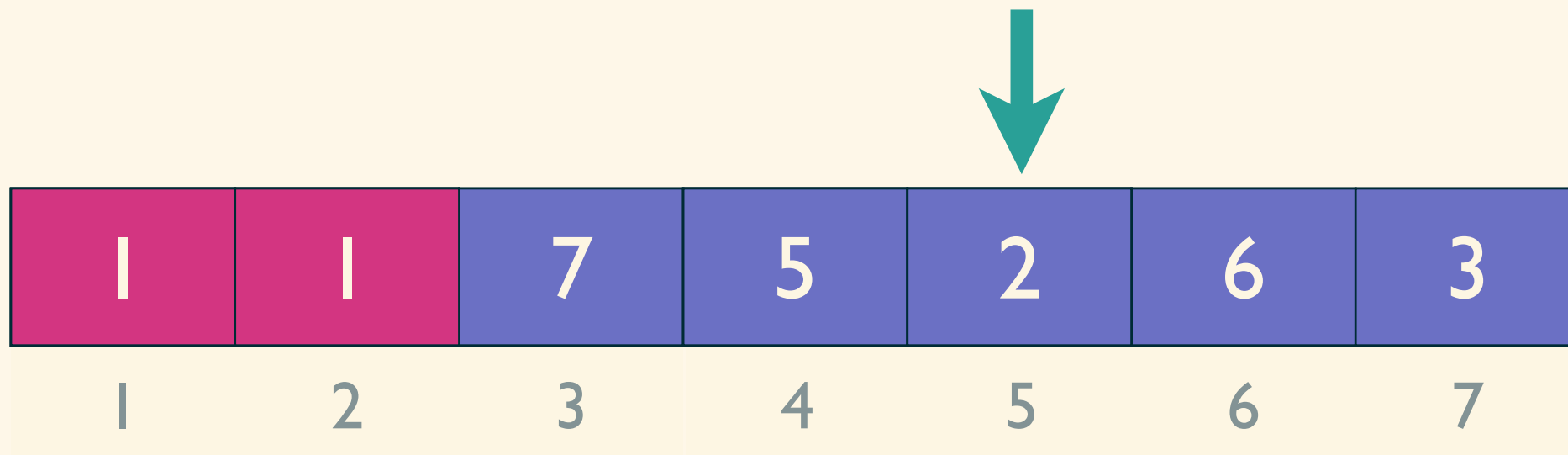
Minimum:

5

Position:

4

# Find minimum element in unsorted part.



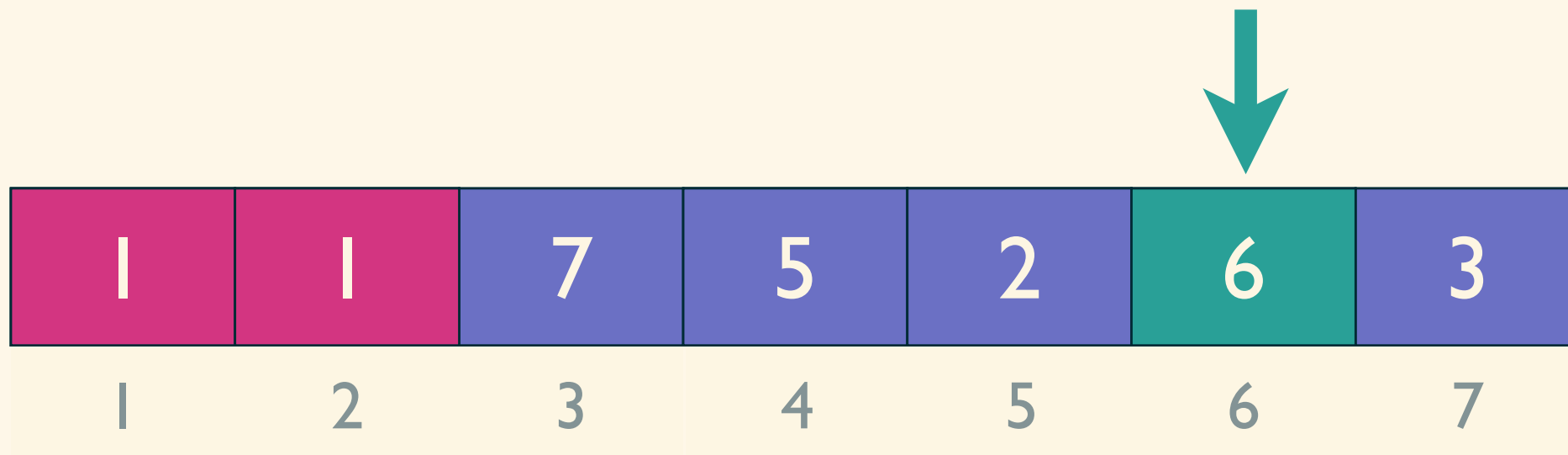
Minimum:

2

Position:

5

# Find minimum element in unsorted part.



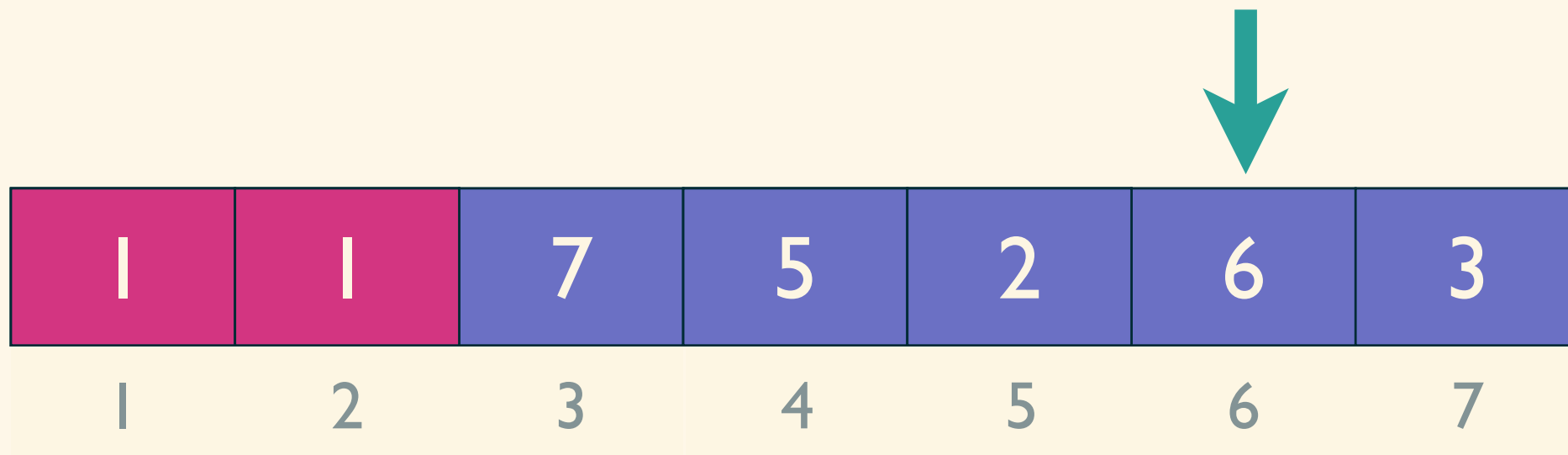
Minimum:

2

Position:

5

# Find minimum element in unsorted part.



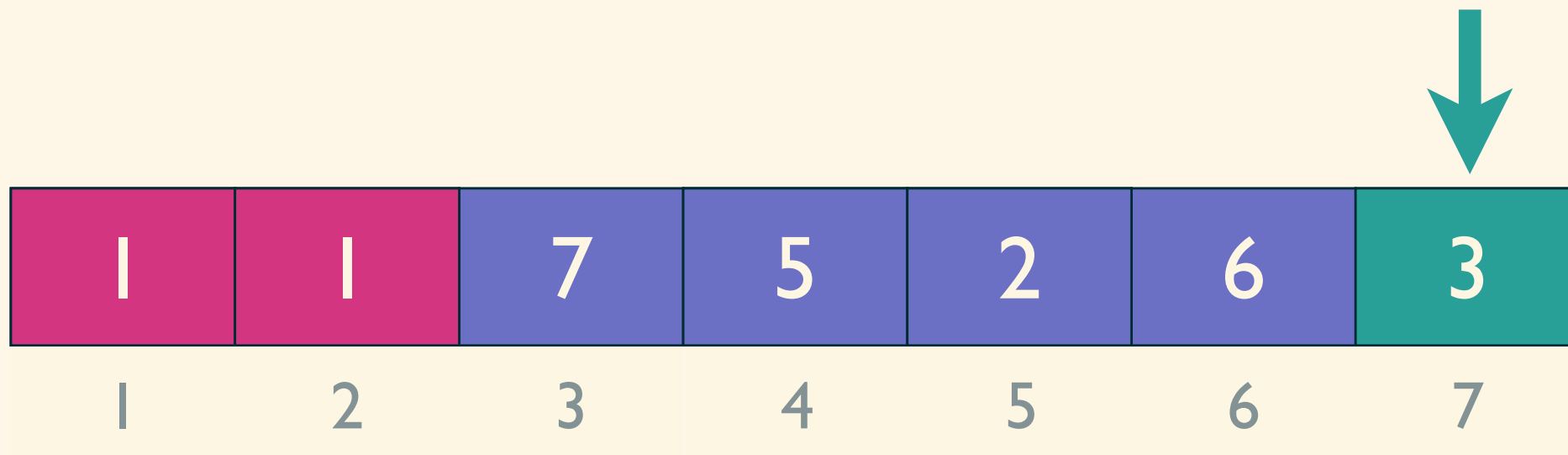
Minimum:

2

Position:

5

# Find minimum element in unsorted part.



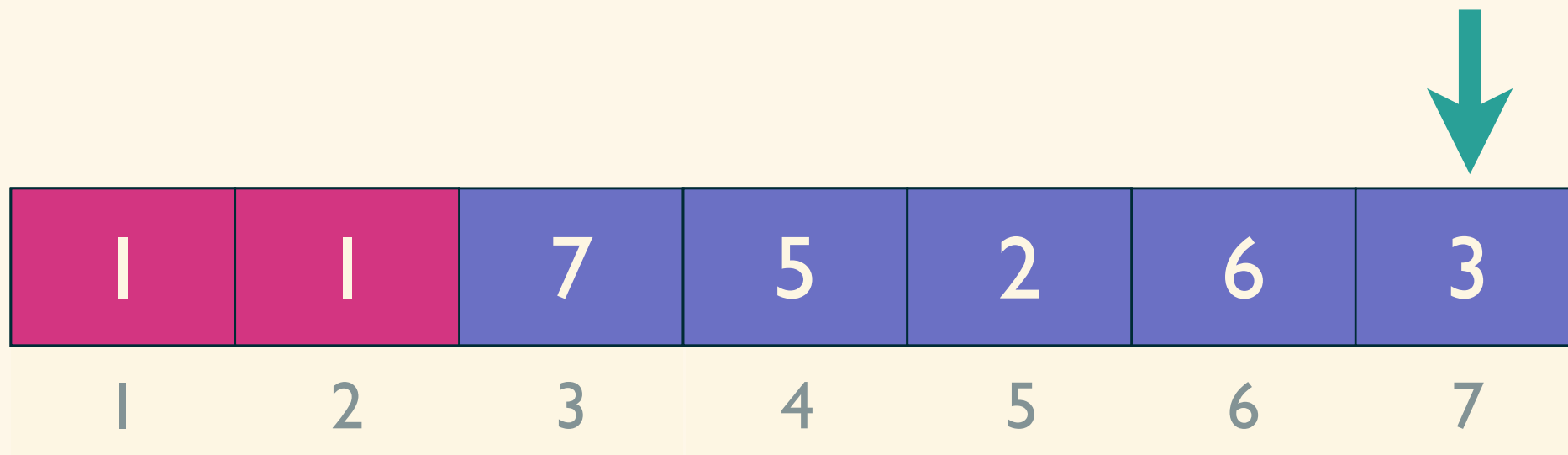
Minimum:

2

Position:

5

# Find minimum element in unsorted part.

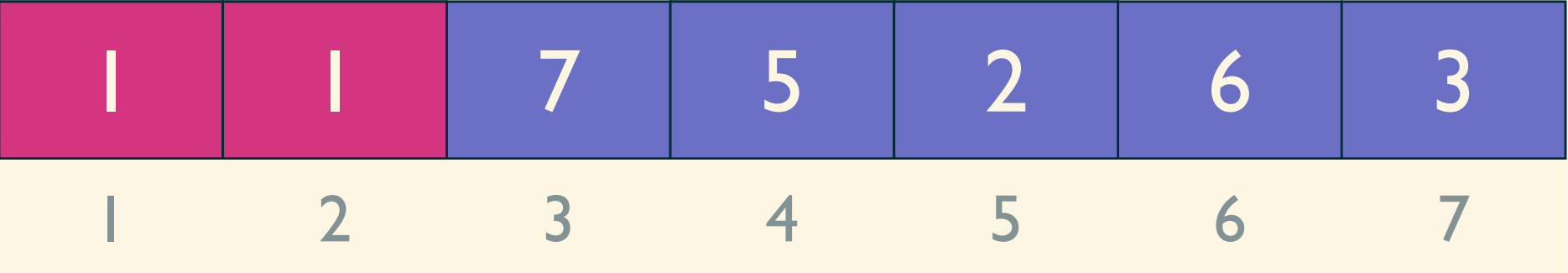


Minimum:

2

Position:

5



Minimum:

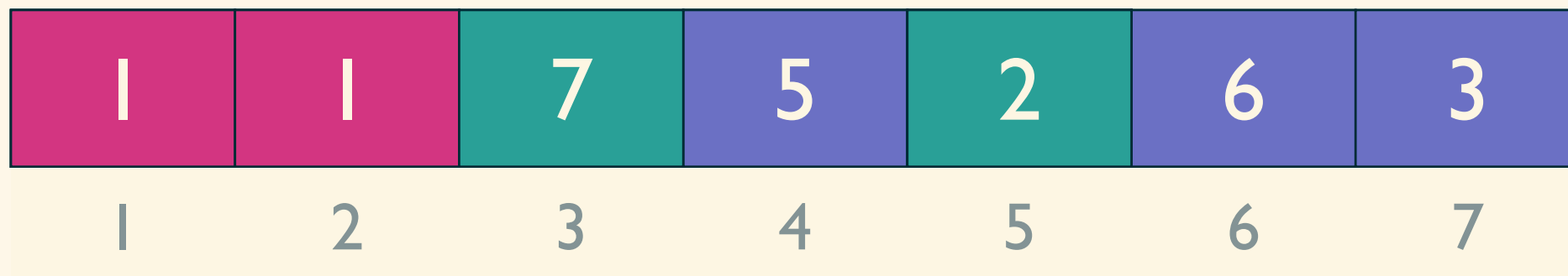


Position:





# Swap element back of sorted part and the minimum element.



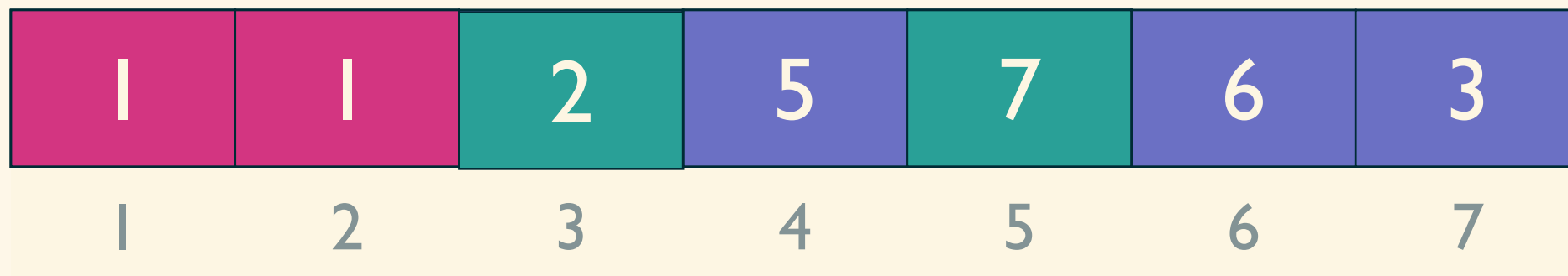
Minimum:



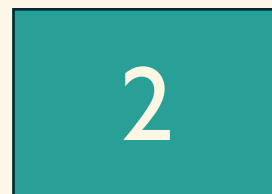
Position:



# Swap element back of sorted part and the minimum element.



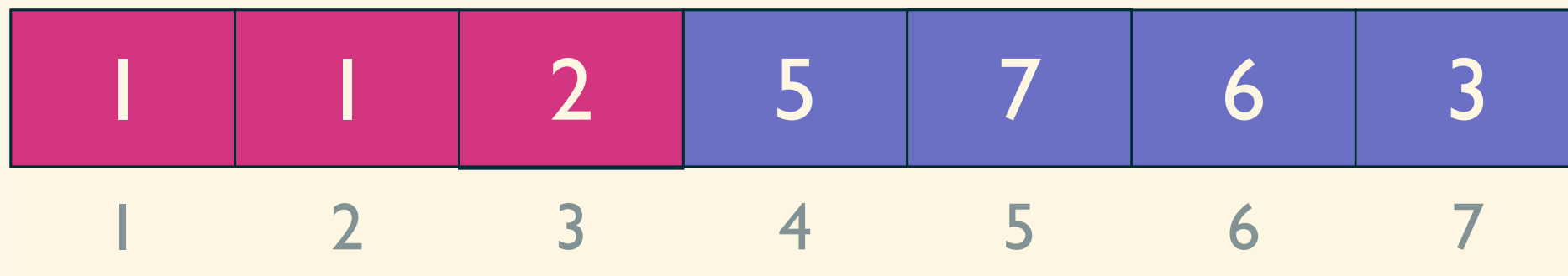
Minimum:



Position:



# Swap element back of sorted part and the minimum element.



Minimum:

2

Position:

5

1	1	2	5	7	6	3
1	2	3	4	5	6	7

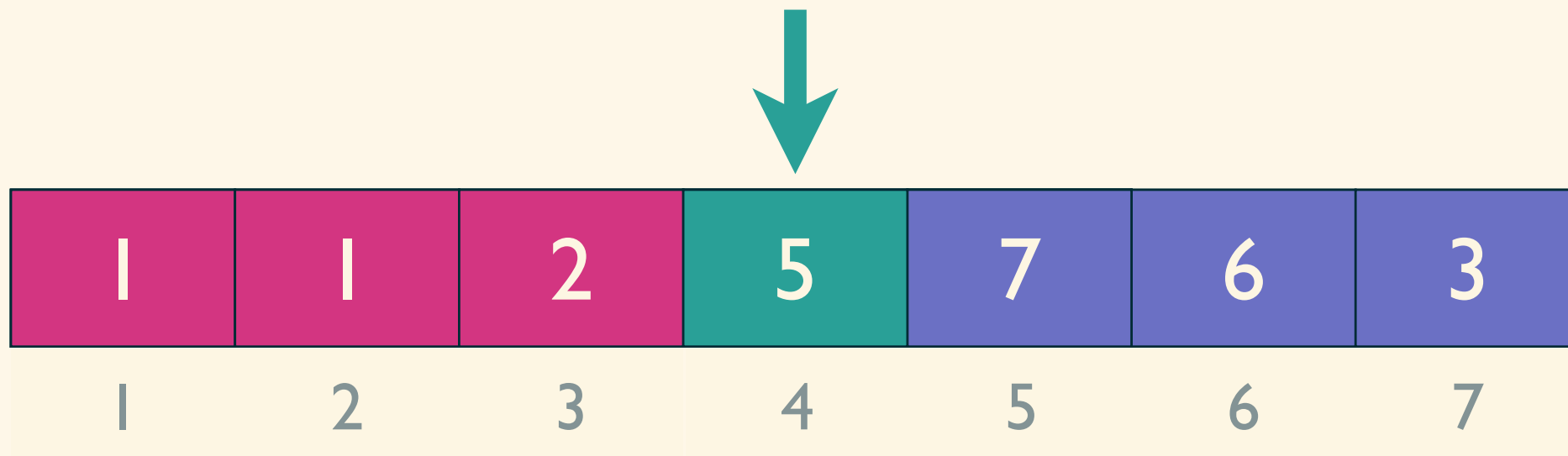
# Find minimum element in unsorted part.

1	1	2	5	7	6	3
1	2	3	4	5	6	7

Minimum:

Position:

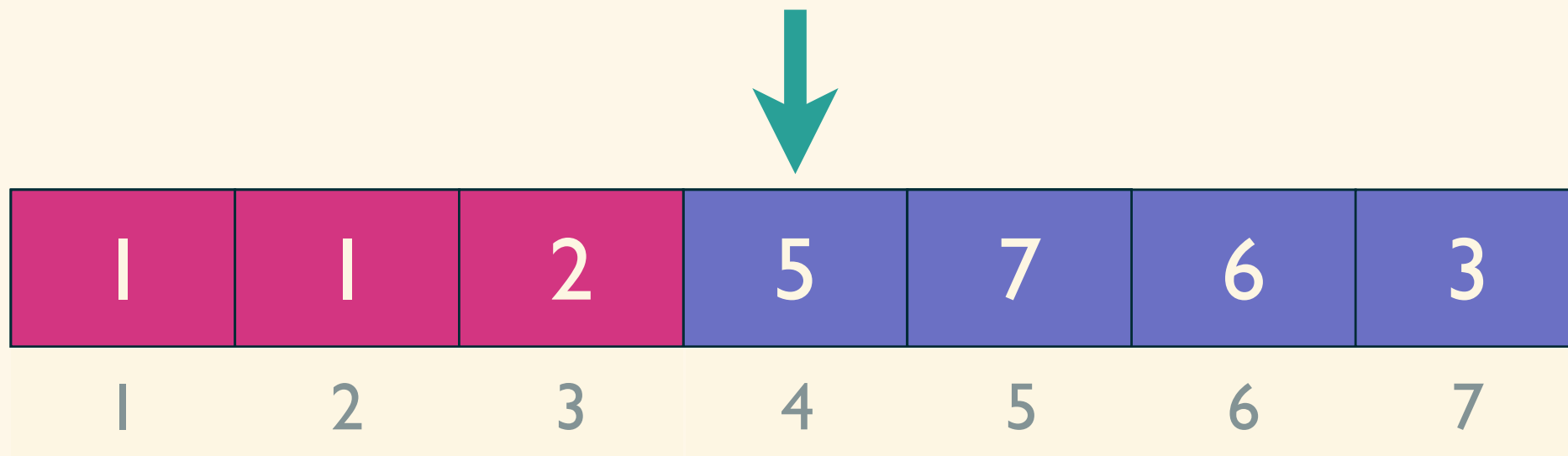
# Find minimum element in unsorted part.



Minimum:

Position:

# Find minimum element in unsorted part.



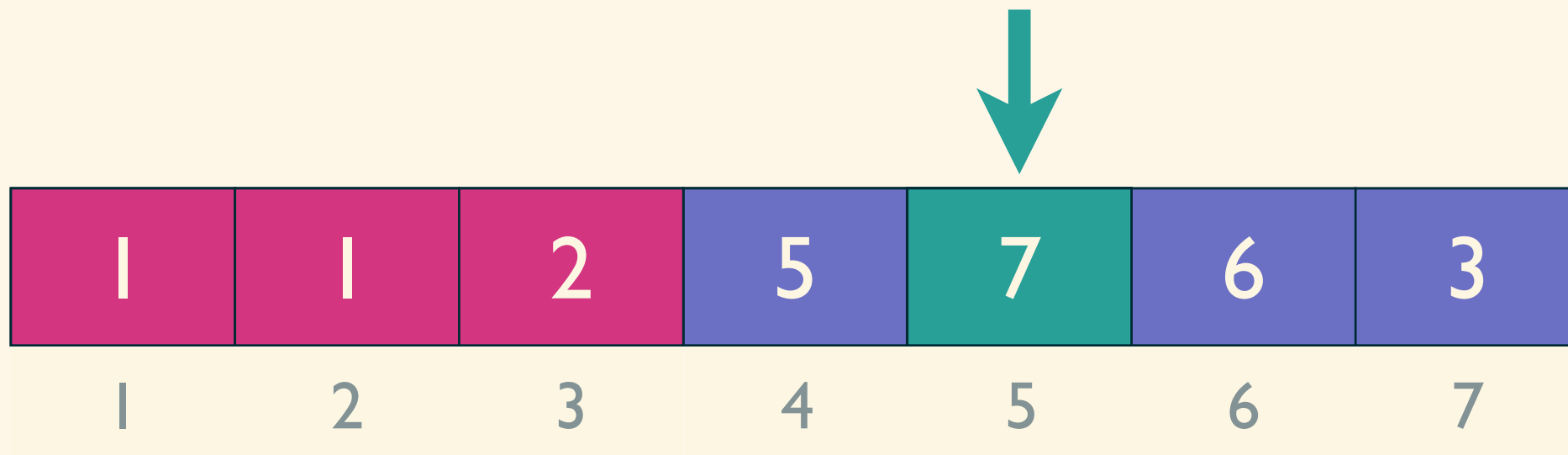
Minimum:

5

Position:

4

# Find minimum element in unsorted part.



Minimum:

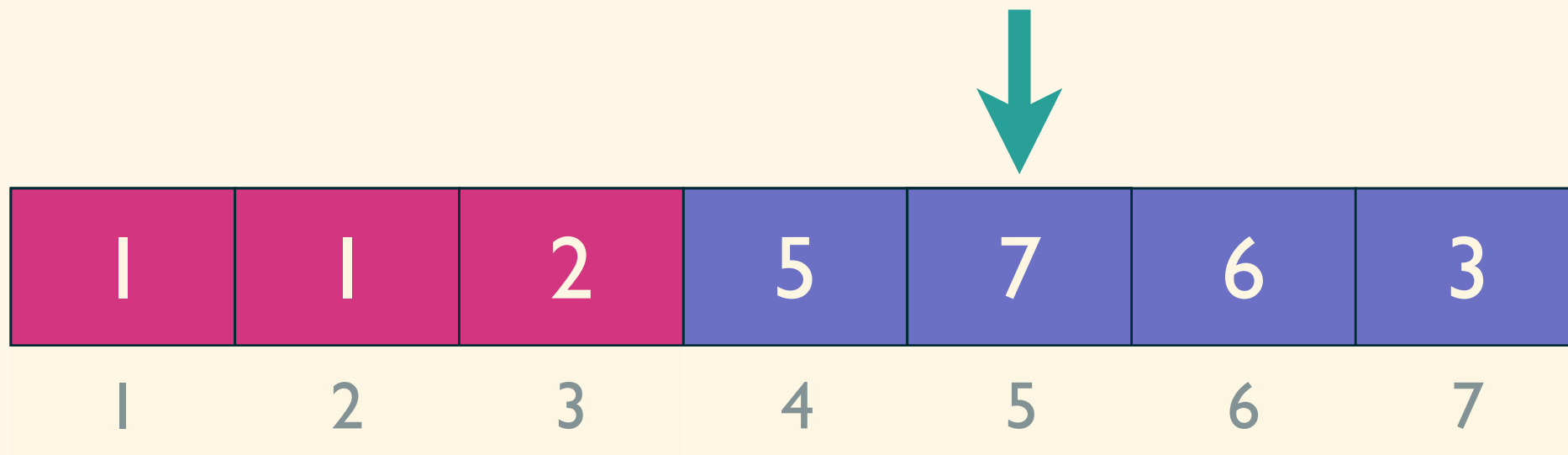
5

Position:

4



# Find minimum element in unsorted part.



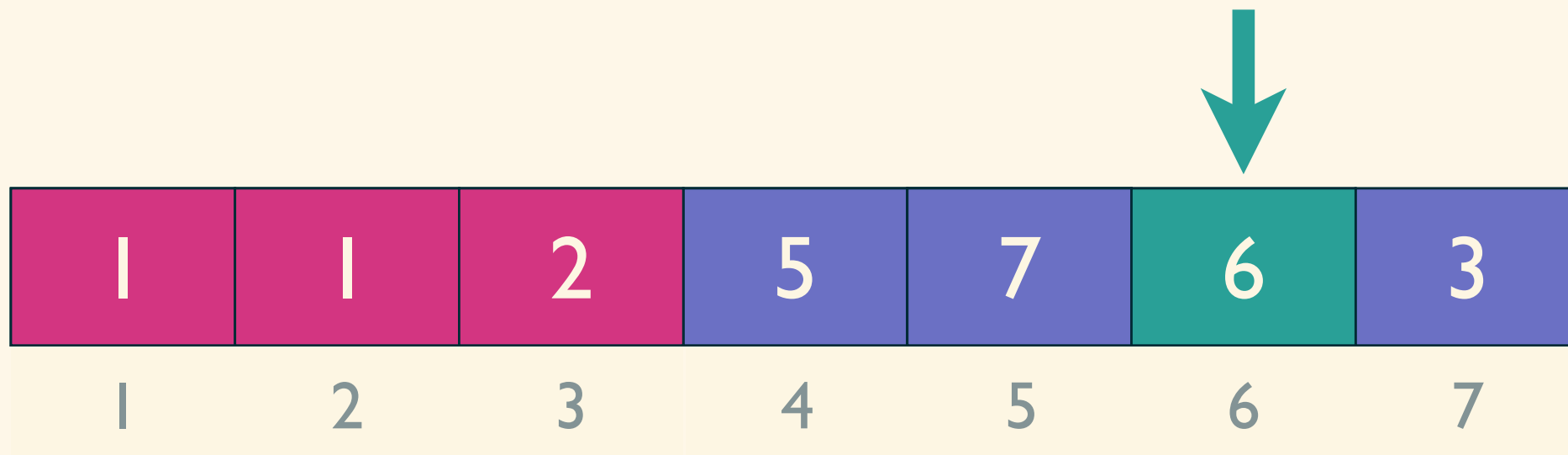
Minimum:

5

Position:

4

# Find minimum element in unsorted part.



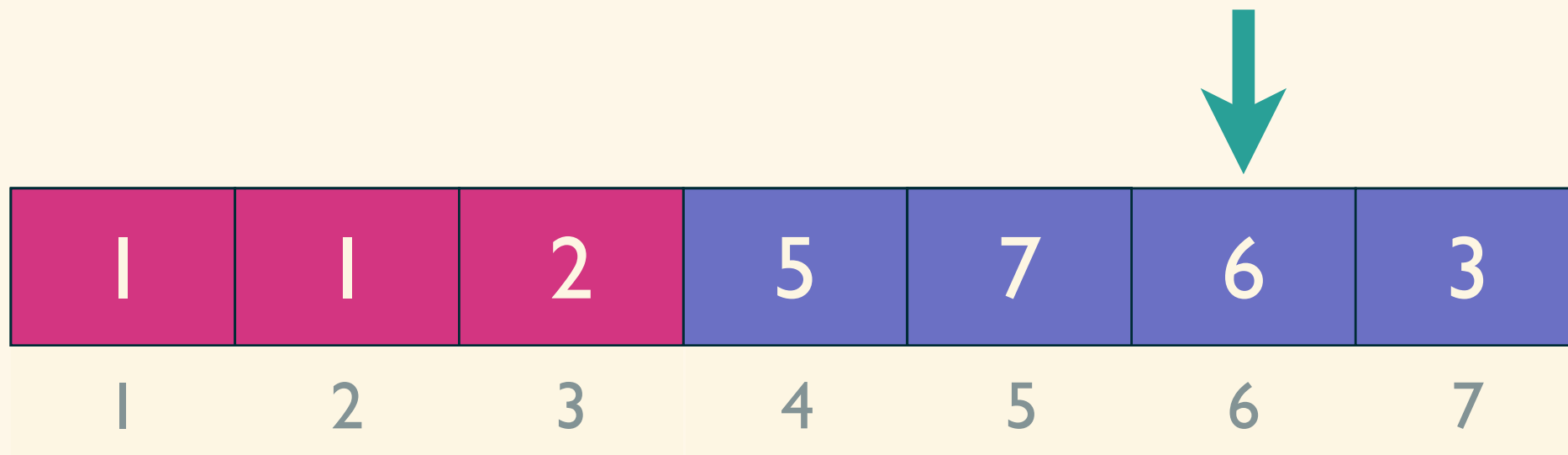
Minimum:

5

Position:

4

# Find minimum element in unsorted part.



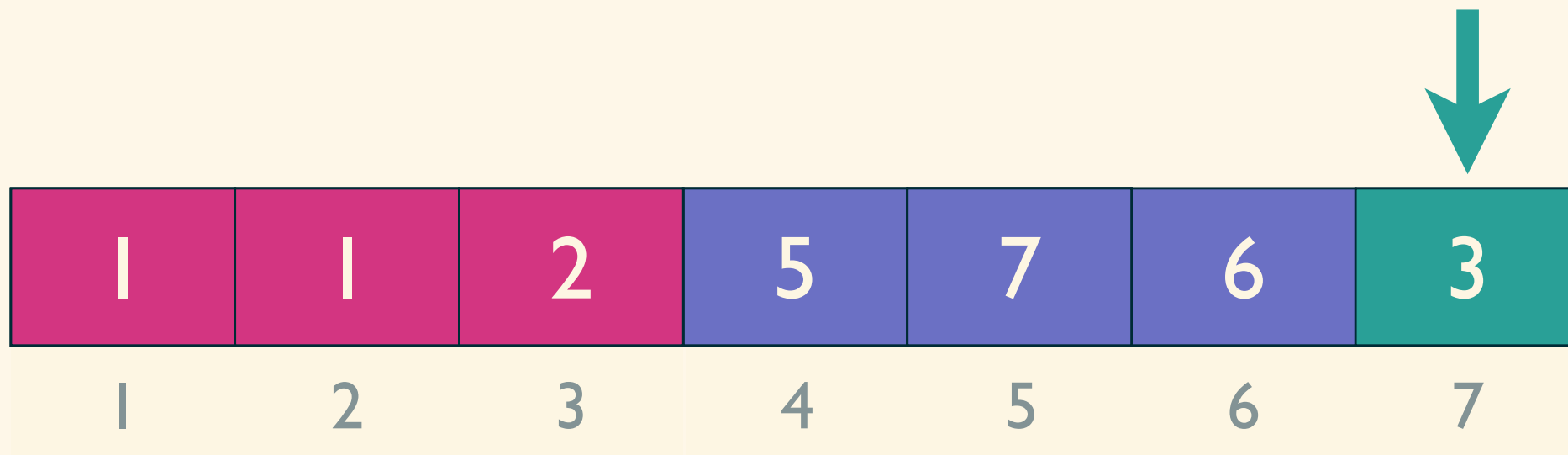
Minimum:

5

Position:

4

# Find minimum element in unsorted part.



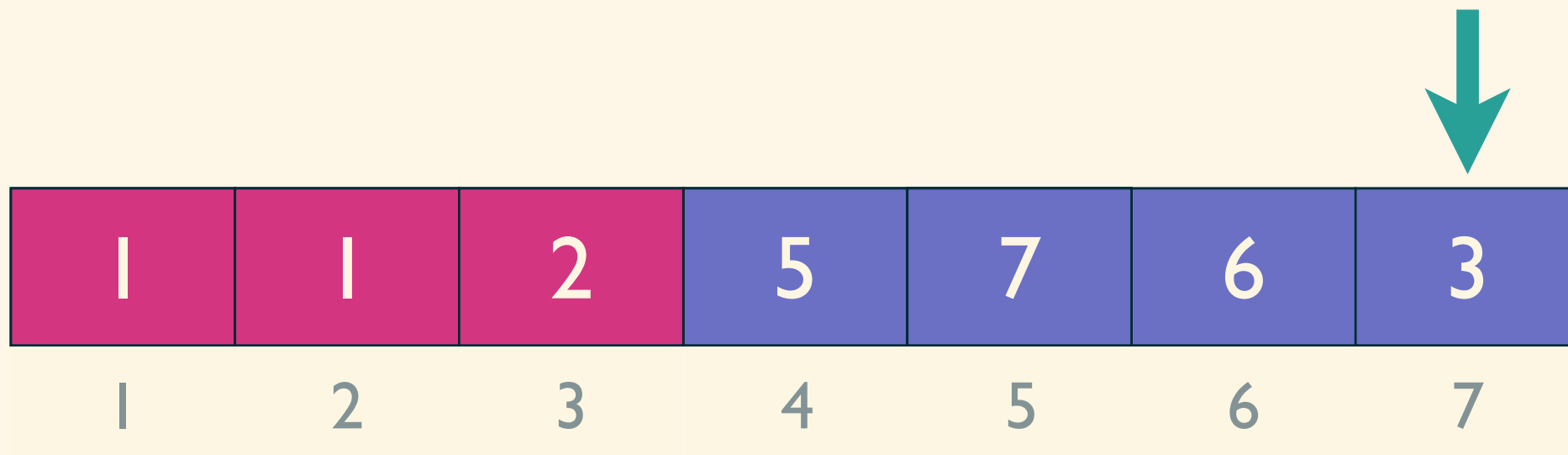
Minimum:

5

Position:

4

# Find minimum element in unsorted part.

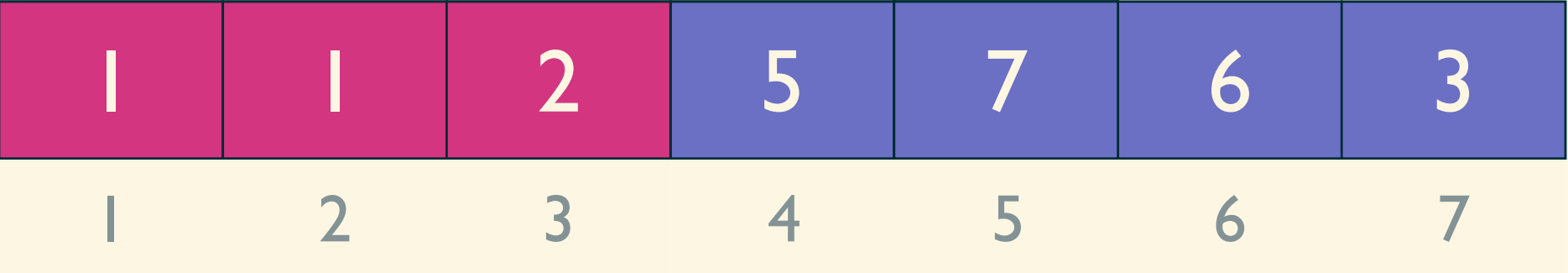


Minimum:

3

Position:

7



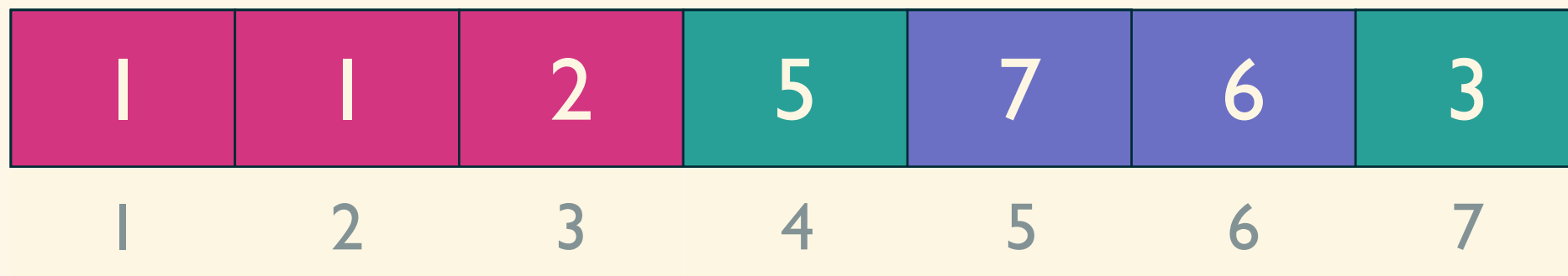
Minimum:



Position:



# Swap element back of sorted part and the minimum element.



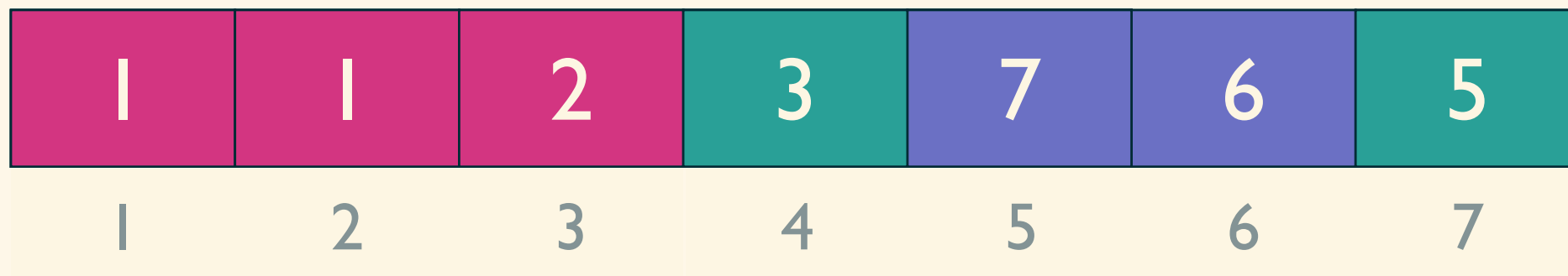
Minimum:



Position:



# Swap element back of sorted part and the minimum element.



Minimum:

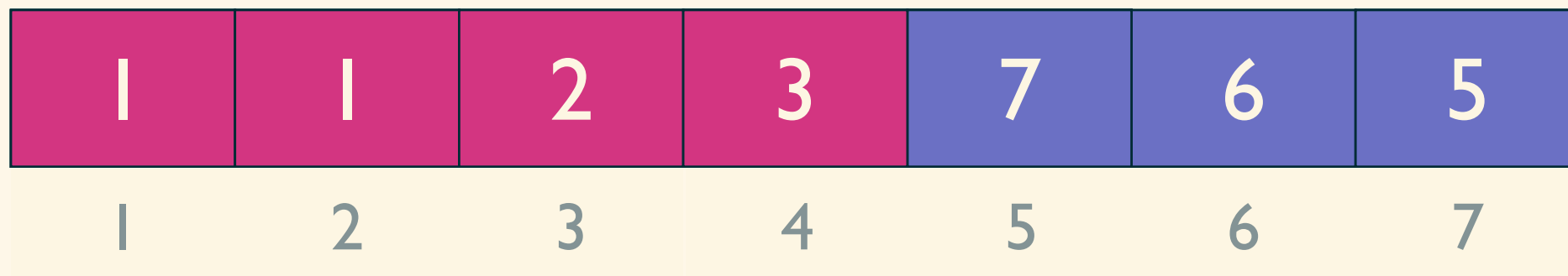


Position:

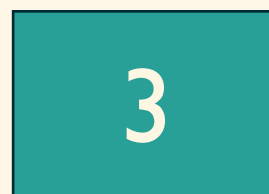




# Swap element back of sorted part and the minimum element.



Minimum:



Position:



1	1	2	3	7	6	5
1	2	3	4	5	6	7

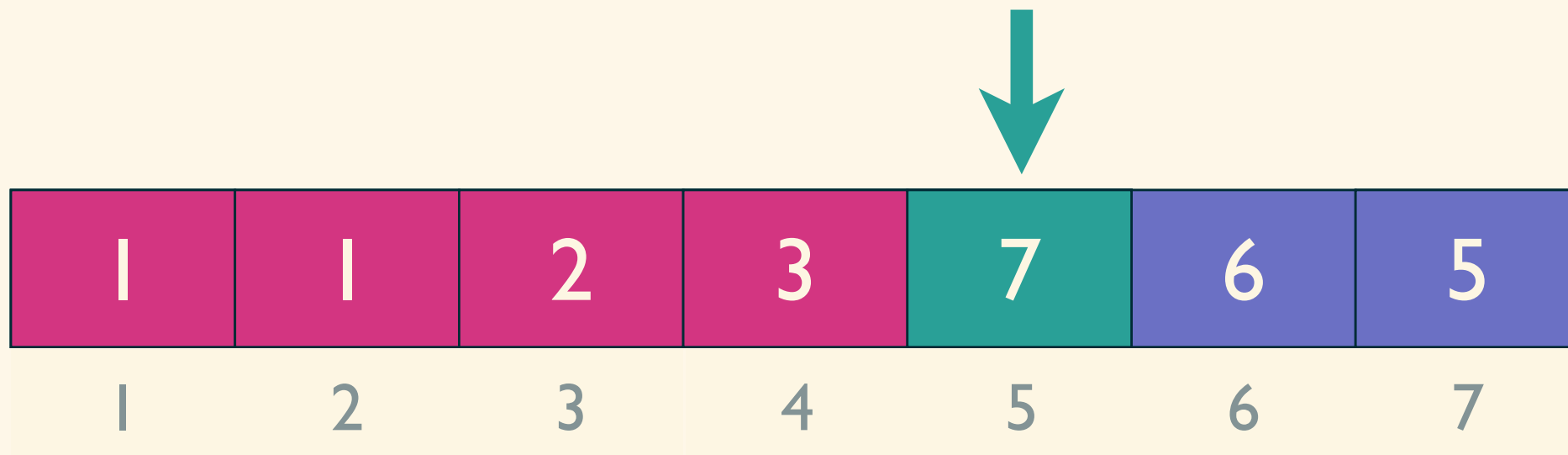
# Find minimum element in unsorted part.

1	1	2	3	7	6	5
1	2	3	4	5	6	7

Minimum:

Position:

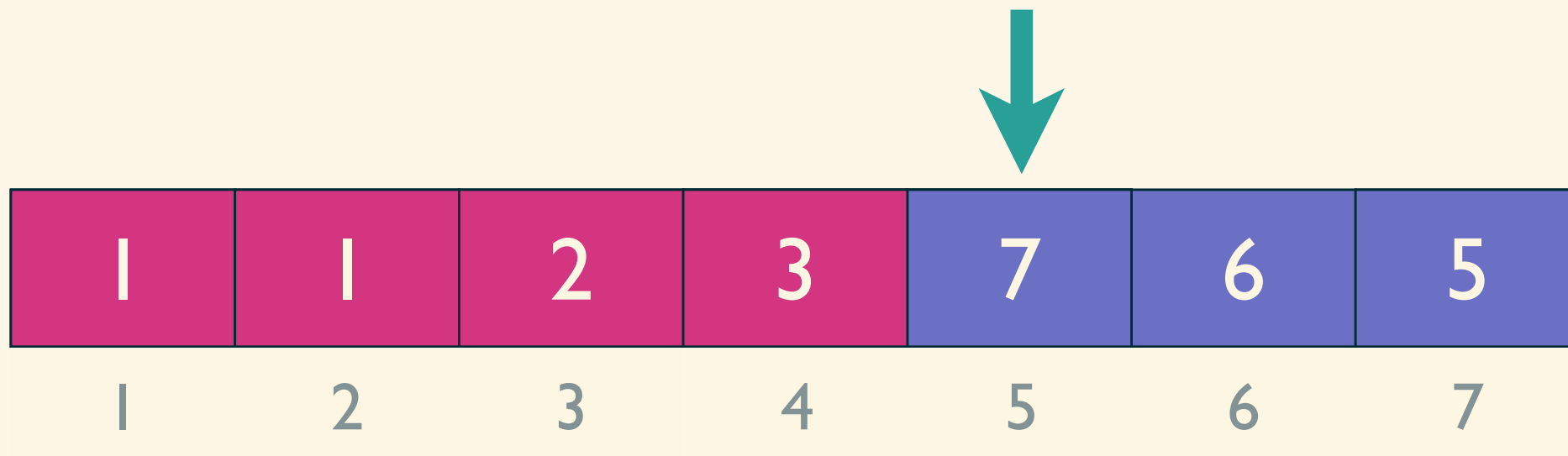
# Find minimum element in unsorted part.



Minimum:

Position:

# Find minimum element in unsorted part.



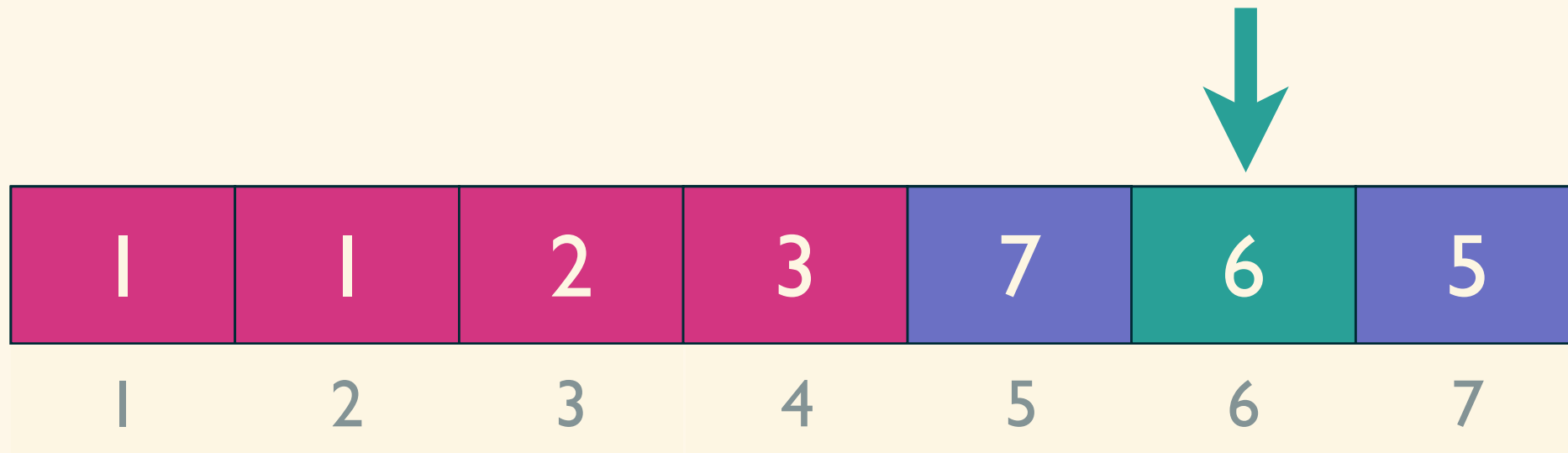
Minimum:

7

Position:

5

# Find minimum element in unsorted part.



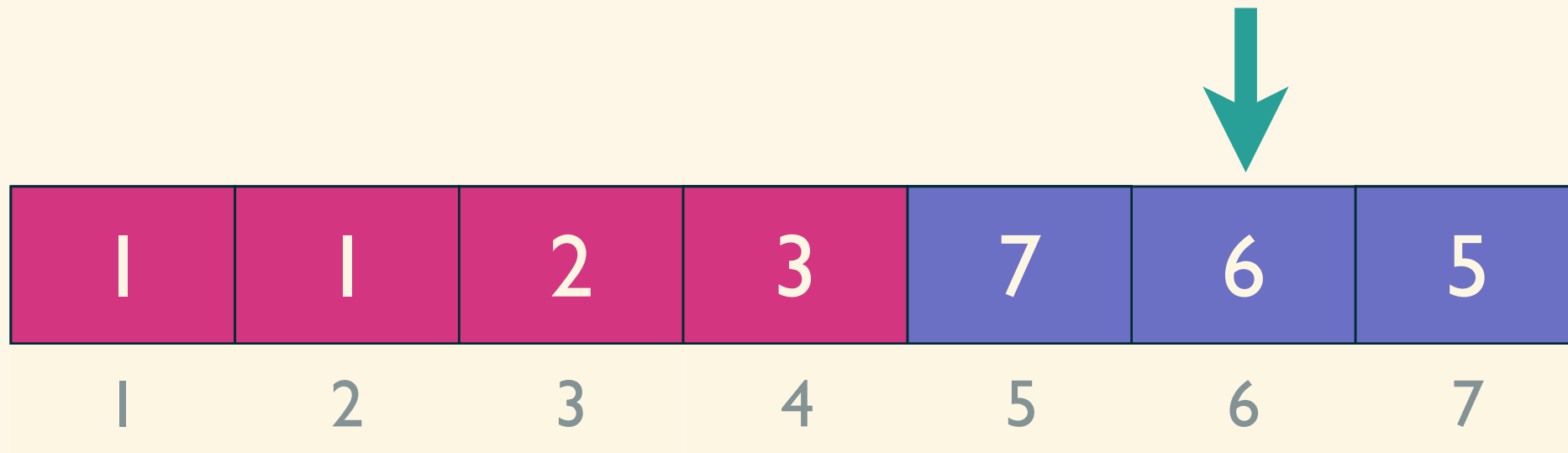
Minimum:

7

Position:

5

# Find minimum element in unsorted part.



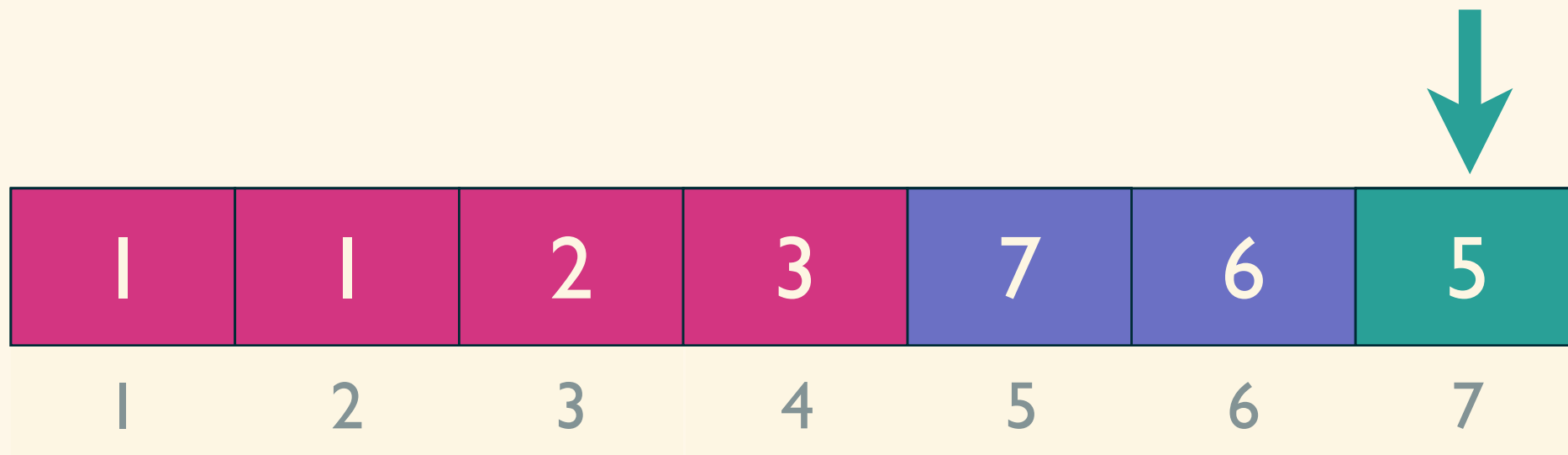
Minimum:

6

Position:

6

# Find minimum element in unsorted part.



Minimum:

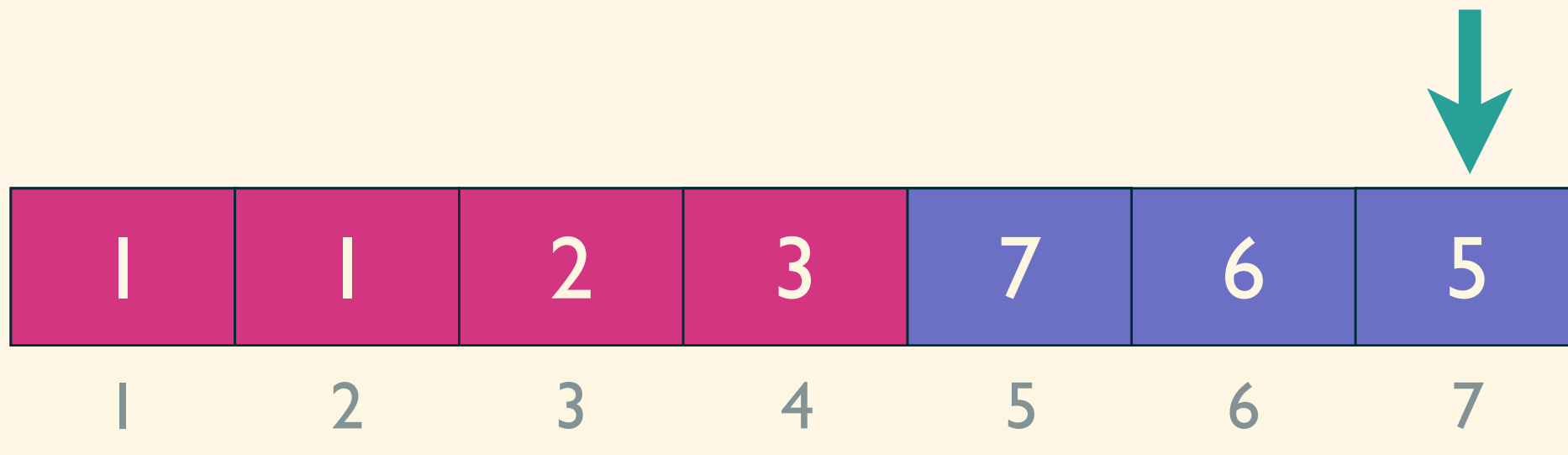
6

Position:

6



# Find minimum element in unsorted part.

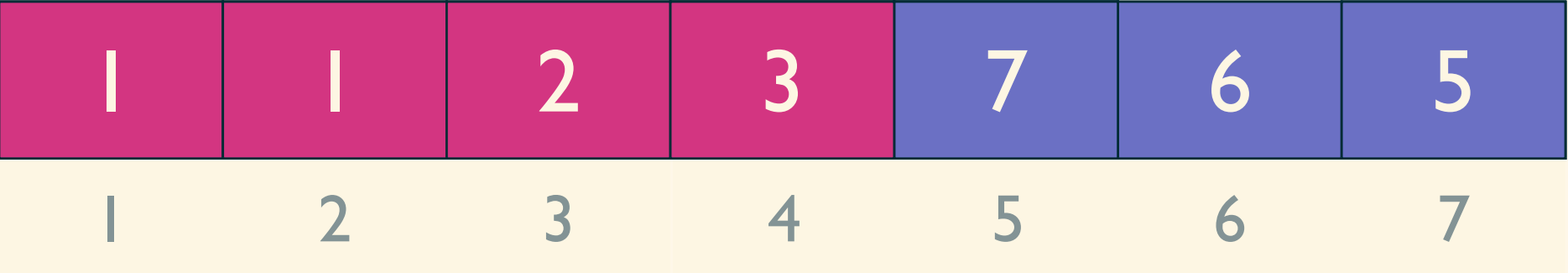


Minimum:

5

Position:

7



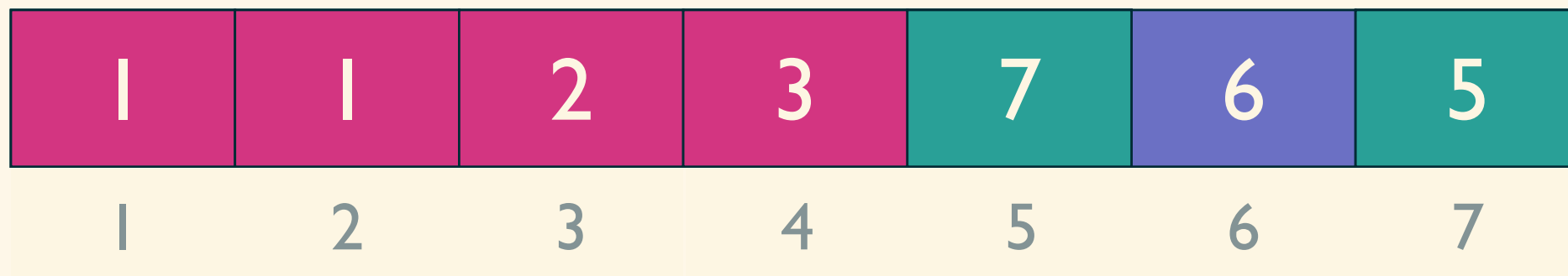
Minimum:



Position:



# Swap element back of sorted part and the minimum element.



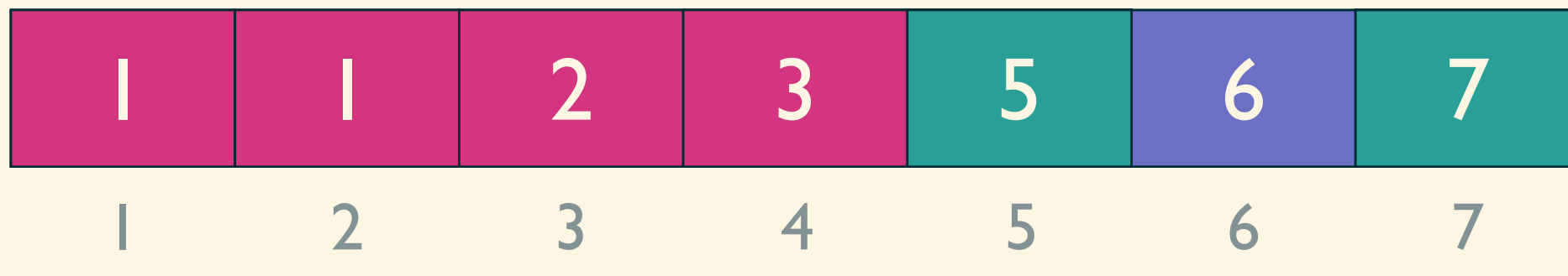
Minimum:



Position:



# Swap element back of sorted part and the minimum element.



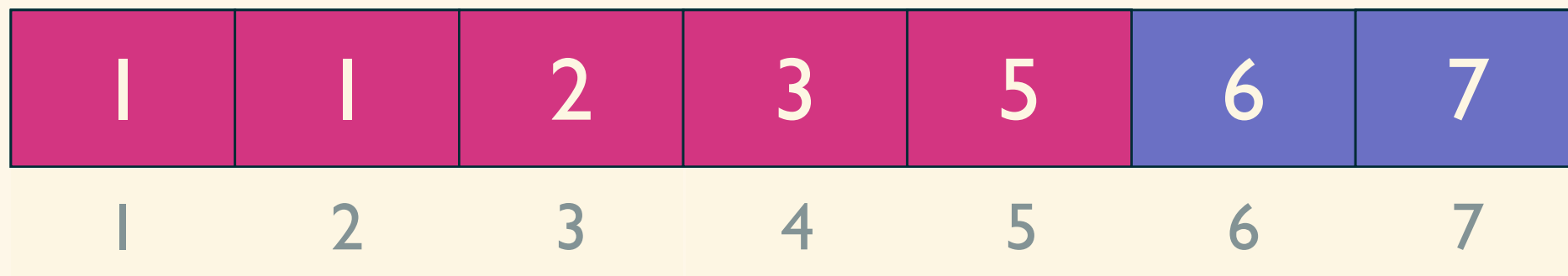
Minimum:



Position:



# Swap element back of sorted part and the minimum element.



Minimum:



Position:



1	1	2	3	5	6	7
1	2	3	4	5	6	7

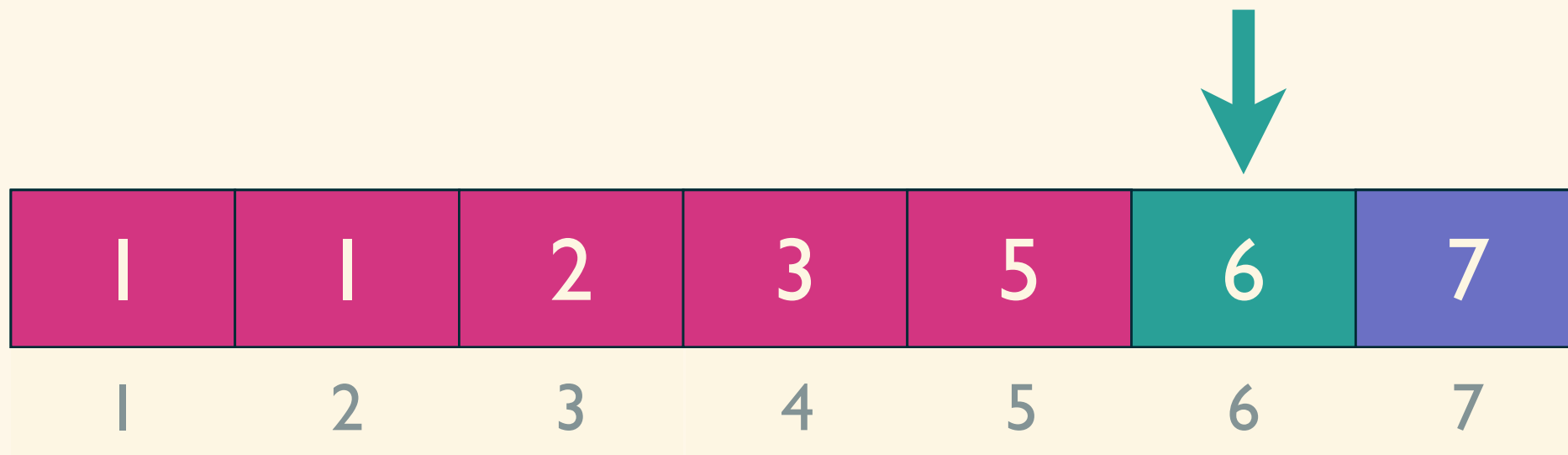
# Find minimum element in unsorted part.

1	1	2	3	5	6	7
1	2	3	4	5	6	7

Minimum:

Position:

# Find minimum element in unsorted part.

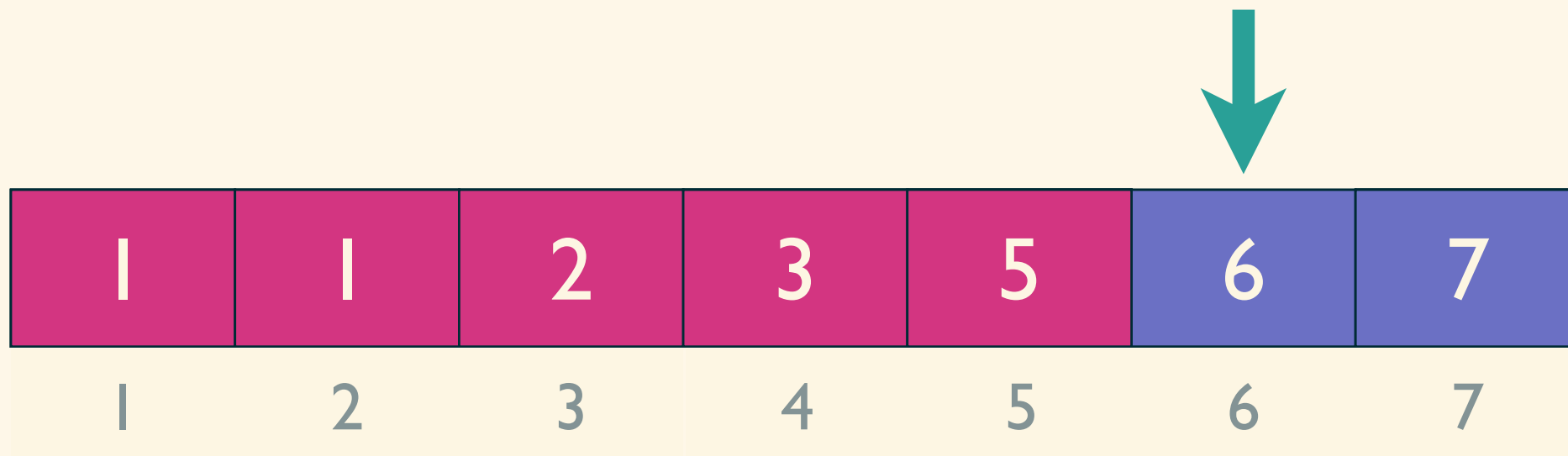


Minimum:

Position:



# Find minimum element in unsorted part.



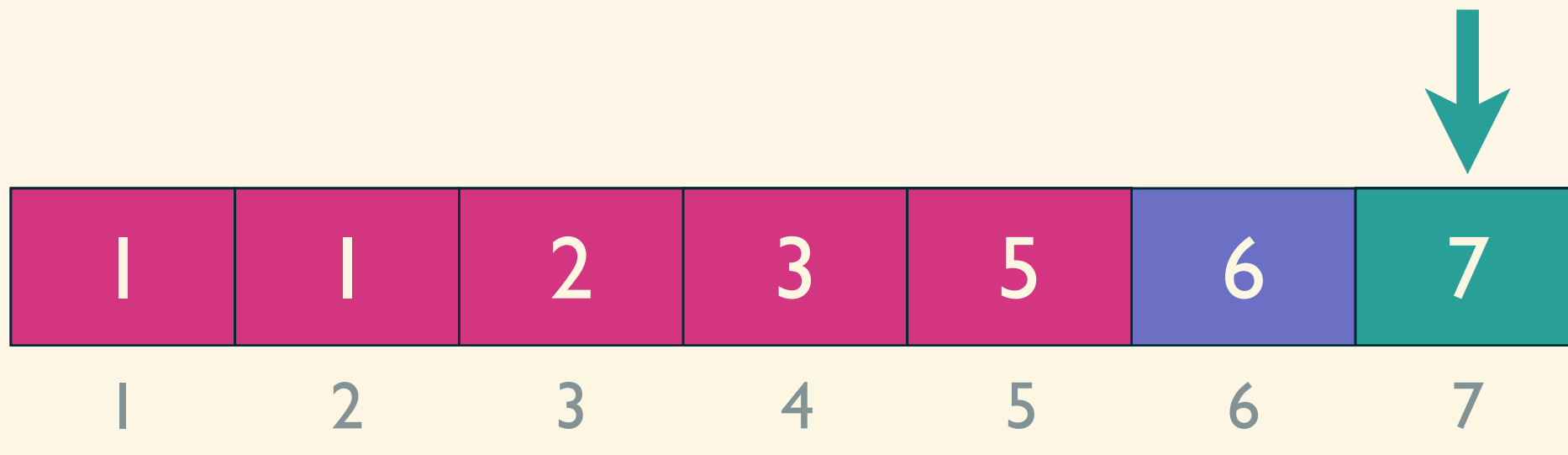
Minimum:

6

Position:

6

# Find minimum element in unsorted part.



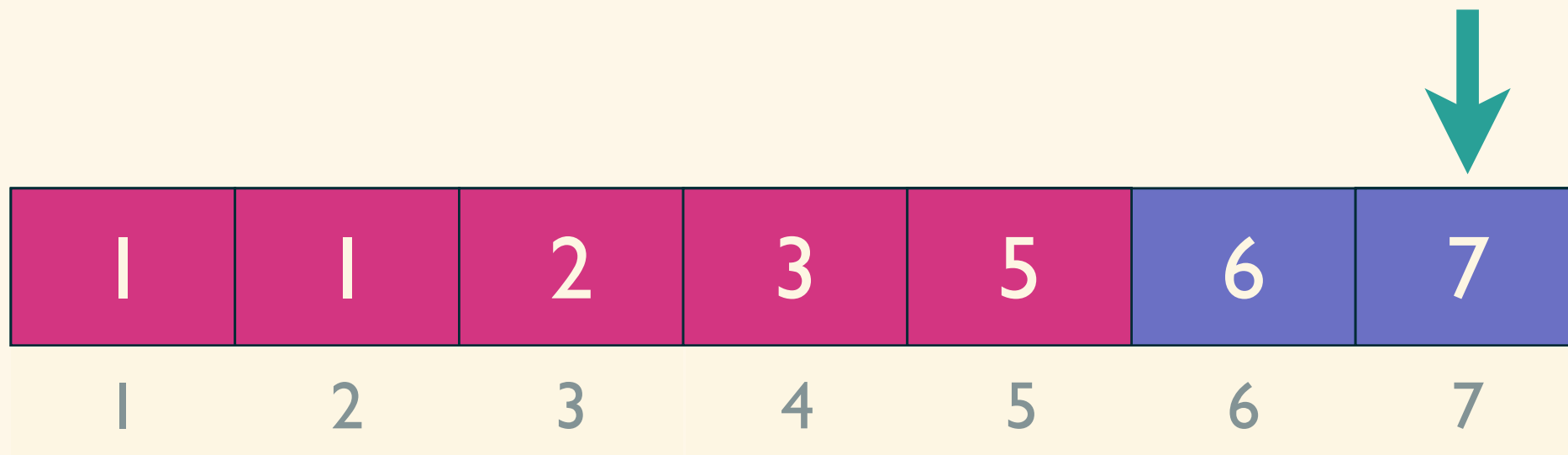
Minimum:

6

Position:

6

# Find minimum element in unsorted part.

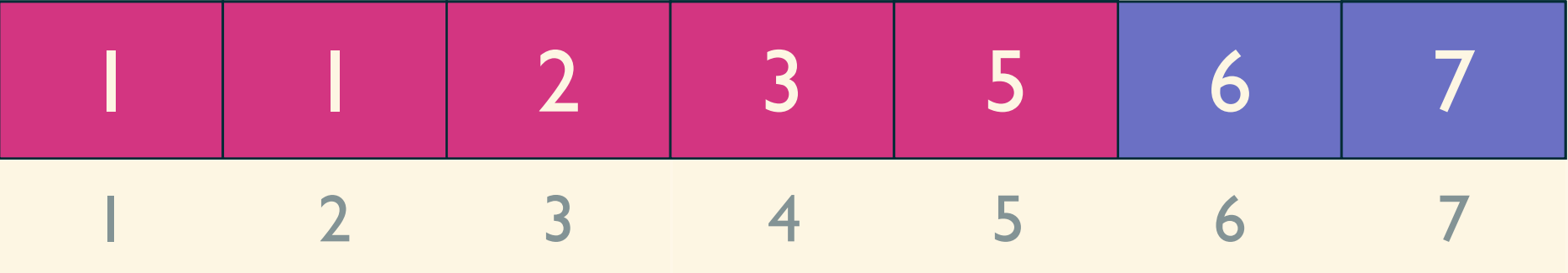


Minimum:

6

Position:

6



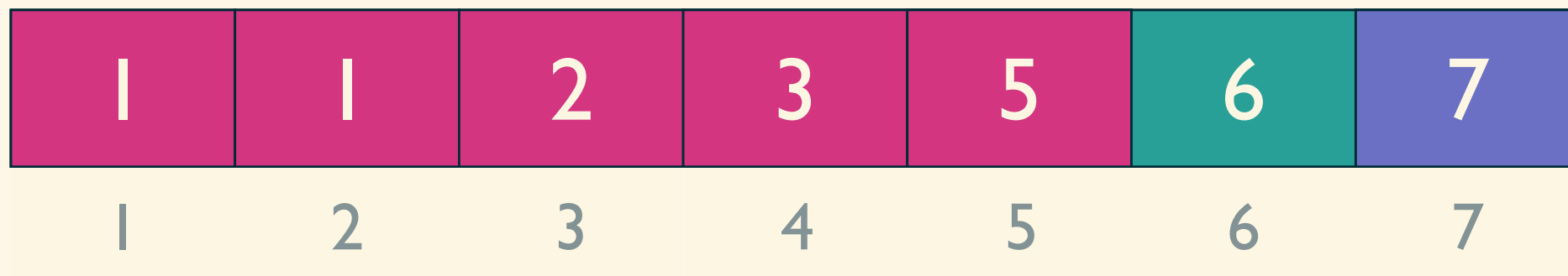
Minimum:



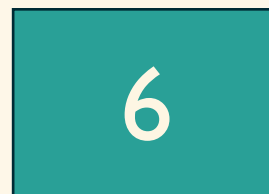
Position:



# Swap element back of sorted part and the minimum element.



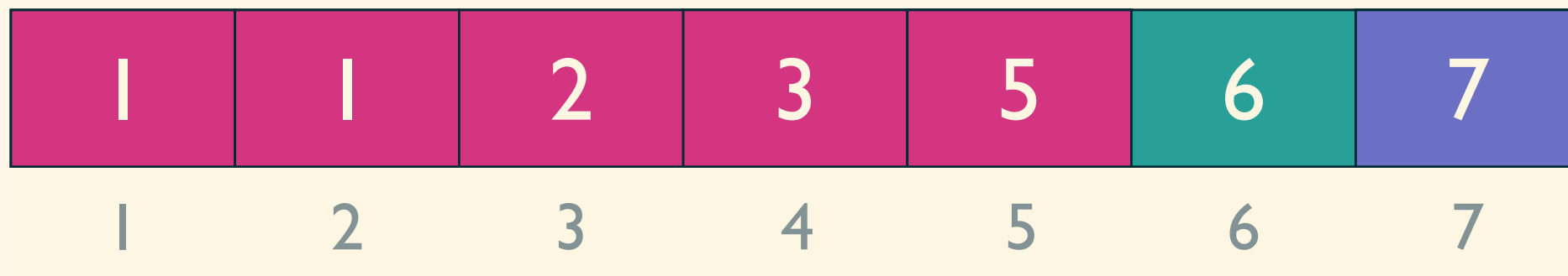
Minimum:



Position:



# Swap element back of sorted part and the minimum element.



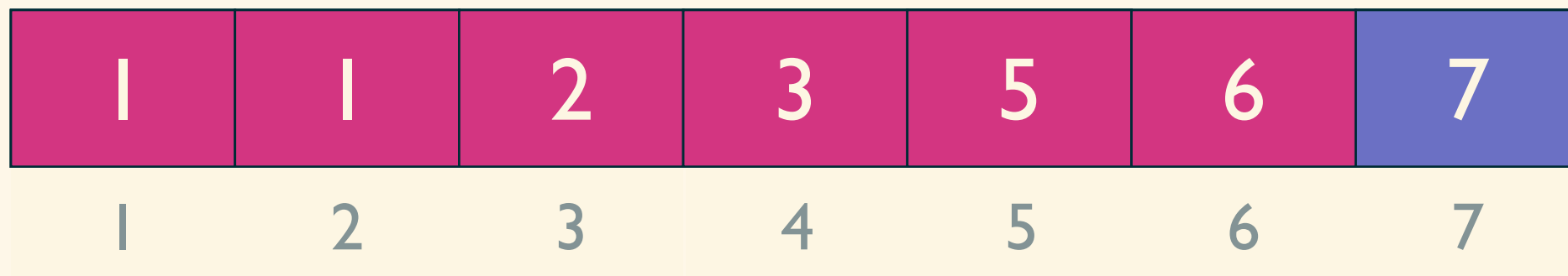
Minimum:



Position:



# Swap element back of sorted part and the minimum element.



Minimum:



Position:



1	1	2	3	5	6	7
1	2	3	4	5	6	7



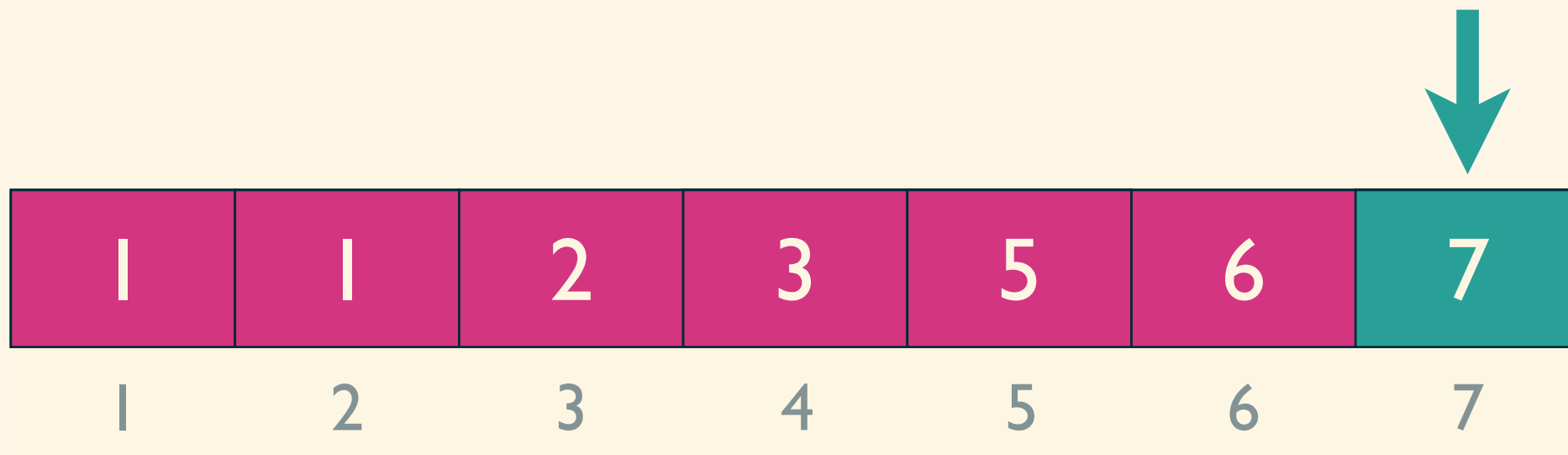
# Find minimum element in unsorted part.

1	1	2	3	5	6	7
1	2	3	4	5	6	7

**Minimum:**

**Position:**

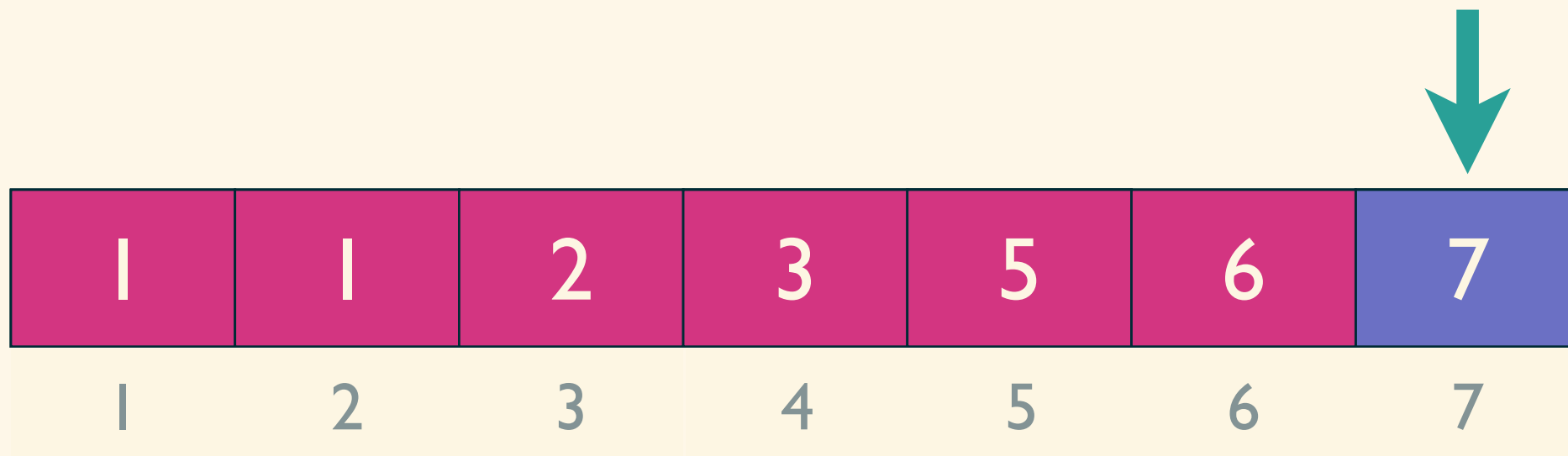
# Find minimum element in unsorted part.



Minimum:

Position:

# Find minimum element in unsorted part.

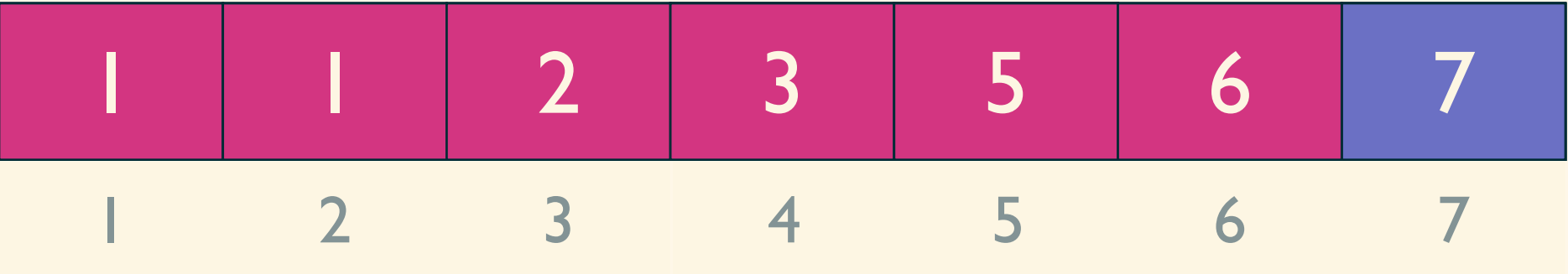


Minimum:

7

Position:

7



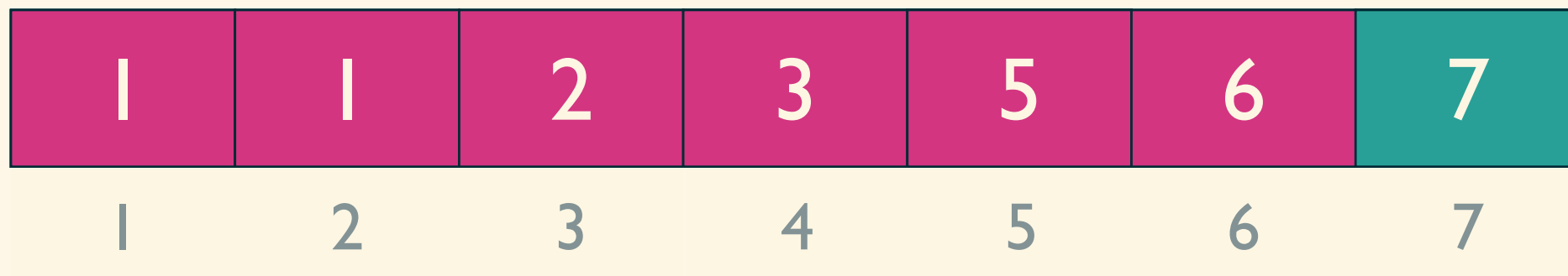
Minimum:



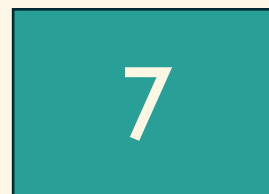
Position:



# Swap element back of sorted part and the minimum element.



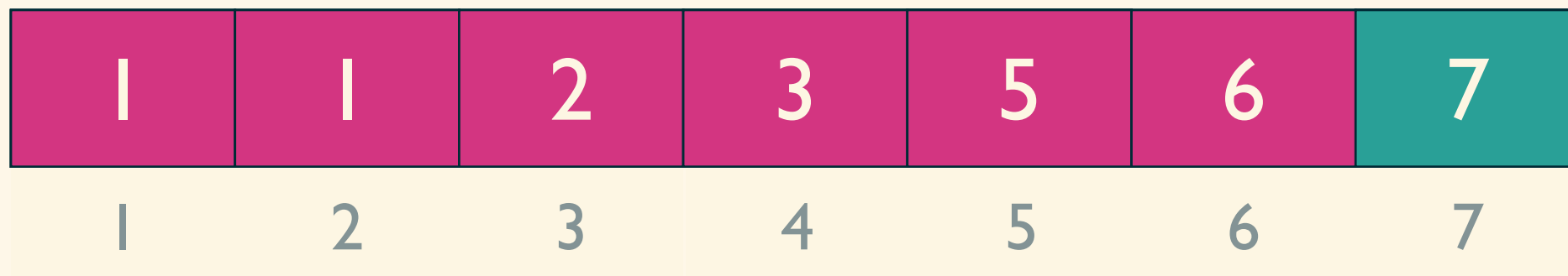
Minimum:



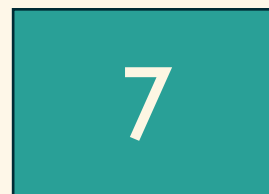
Position:



# Swap element back of sorted part and the minimum element.



Minimum:



Position:



# Swap element back of sorted part and the minimum element.

1	1	2	3	5	6	7
1	2	3	4	5	6	7

Minimum:

7

Position:

7

1	1	2	3	5	6	7
1	2	3	4	5	6	7



# Sort complete.

1	1	2	3	5	6	7
1	2	3	4	5	6	7

# End

