Insertion Sort

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The original sequence.

4	1	2	1	8	9	3

4	1	2	1	8	9	3

Set 1st element as sorted part.

4	1	2	1	8	9	3

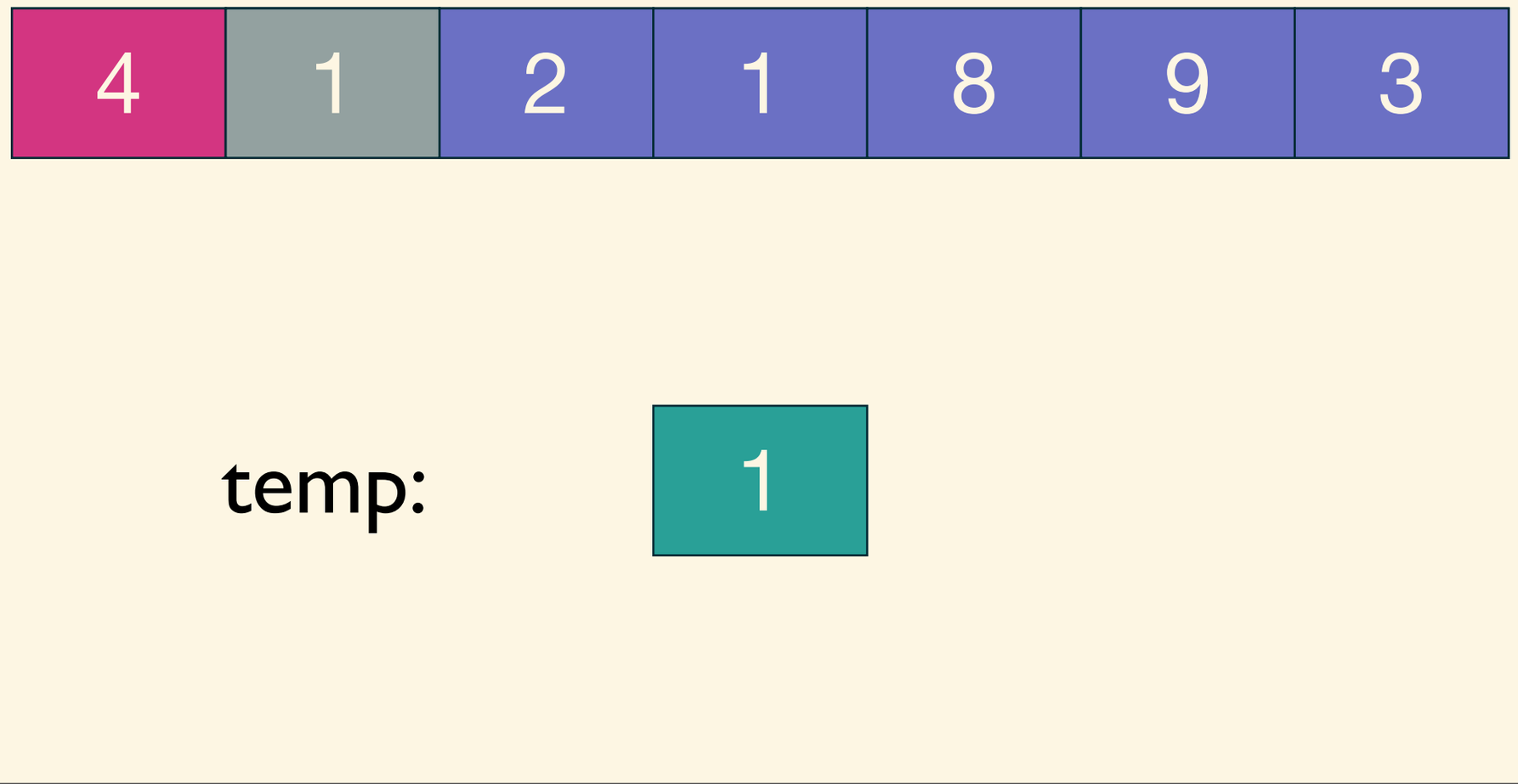
Others are unsorted part.

4
1
2
1
8
9
3

Enumerate elements in unsorted part.

temp:

Copy the value to temporal variable.



temp:

Find the foremost element great than the current element.

temp:

temp:

Insert the element.

temp:

Insert the element.

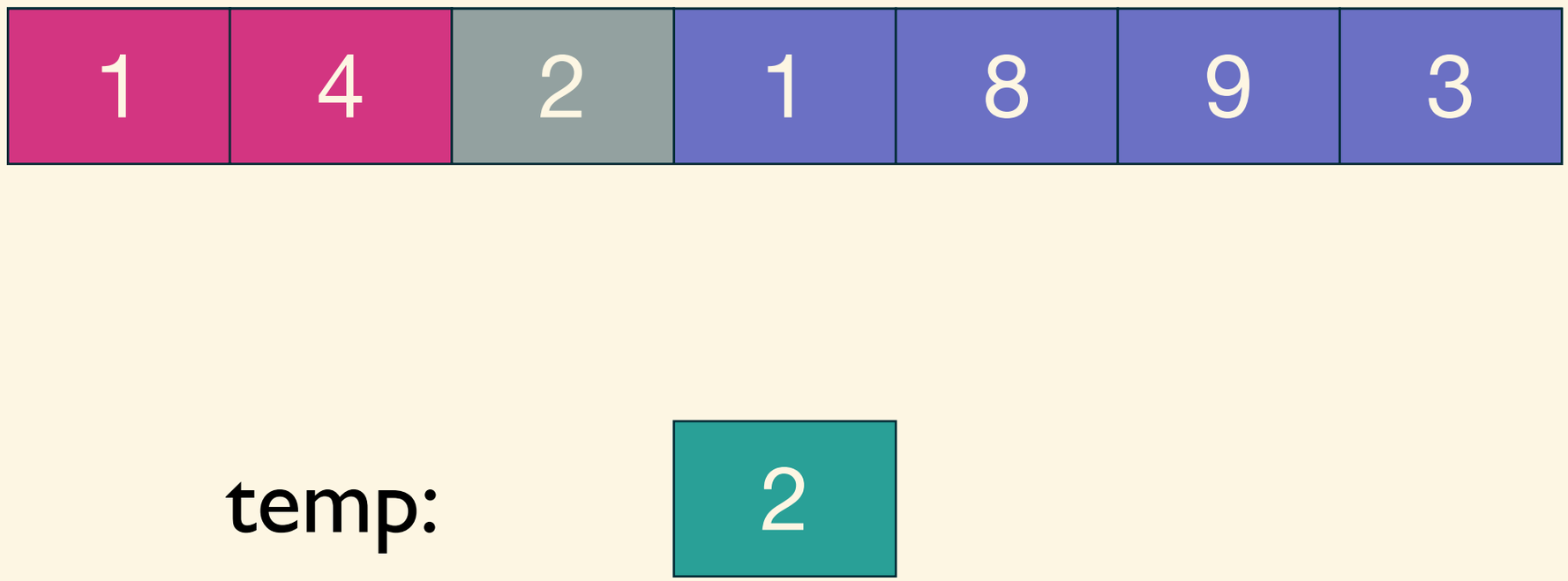
Insert the element.

1
4
2
1
8
9
3

Enumerate next element.

temp:

Copy the value to temporal variable.



temp:

Find the foremost element great than the current element.

temp:

temp:

Insert the element.

temp:

Insert the element.

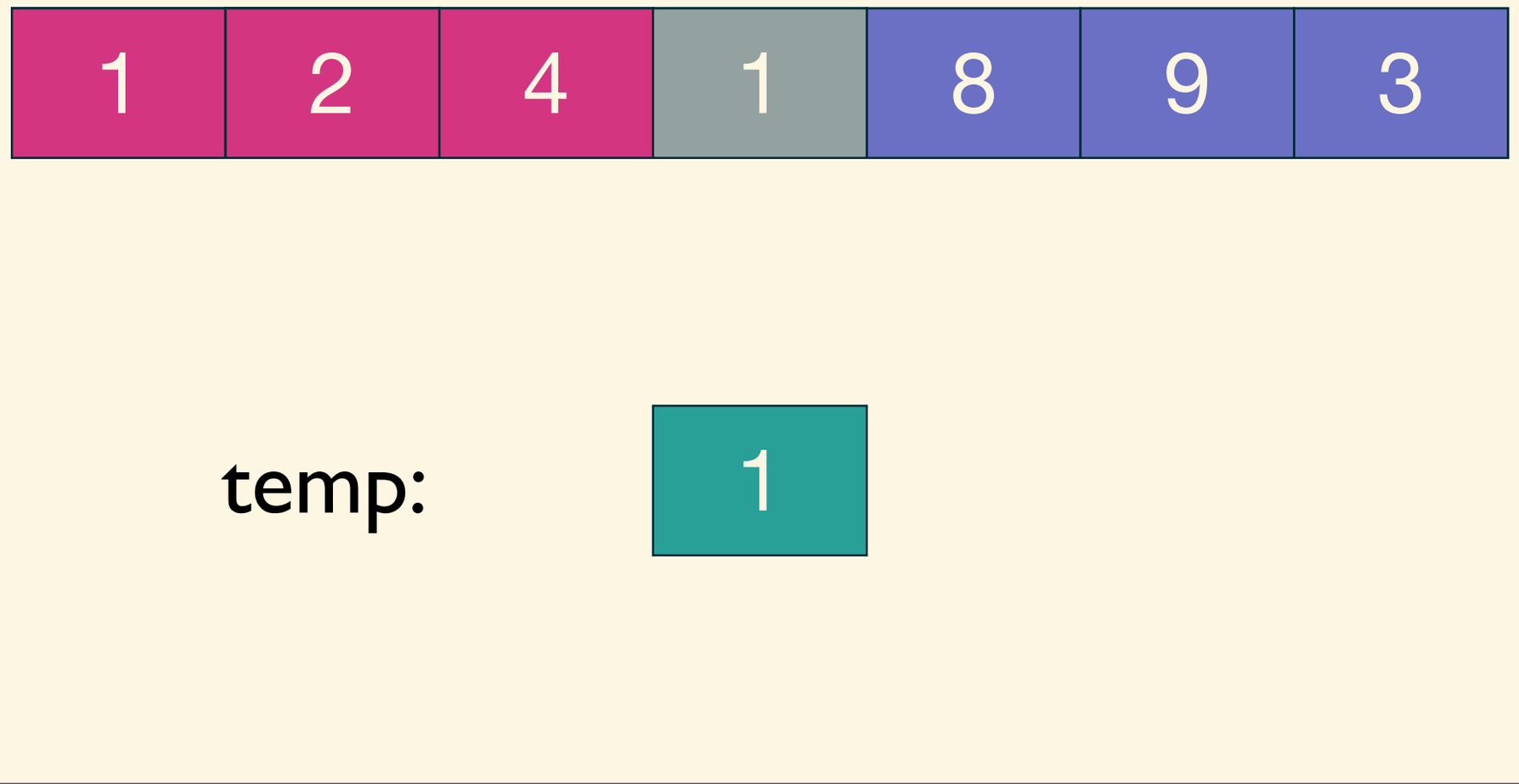
Insert the element.

1	2	4	1	8	9	3

Enumerate next element.

temp:

Copy the value to temporal variable.



temp:

Find the foremost element great than the current element.

temp:

Find the foremost element great than the current element.

temp:

temp:

Insert the element.

temp:

Insert the element.

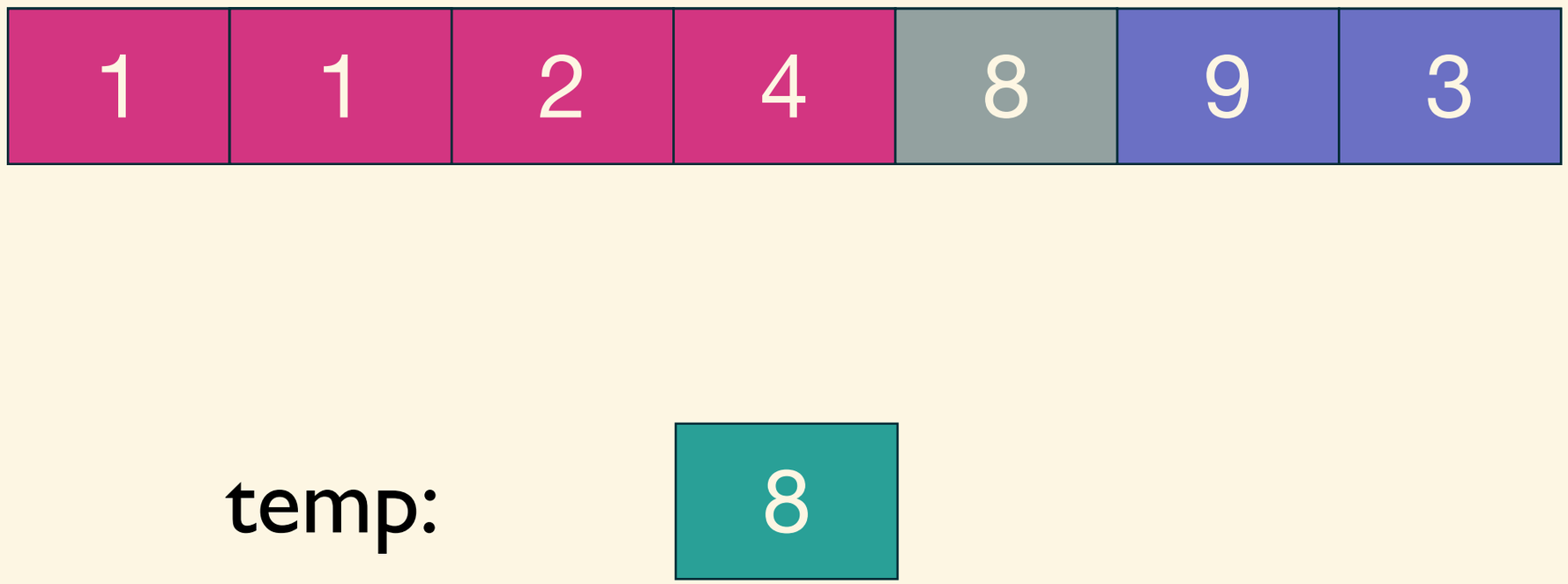
Insert the element.

1	1	2	4	8	9	3

Enumerate next element.

temp:

Copy the value to temporal variable.



temp:

No element is greater than the current element in sorted part.

temp:

temp:

Put back.

temp:

Put back.

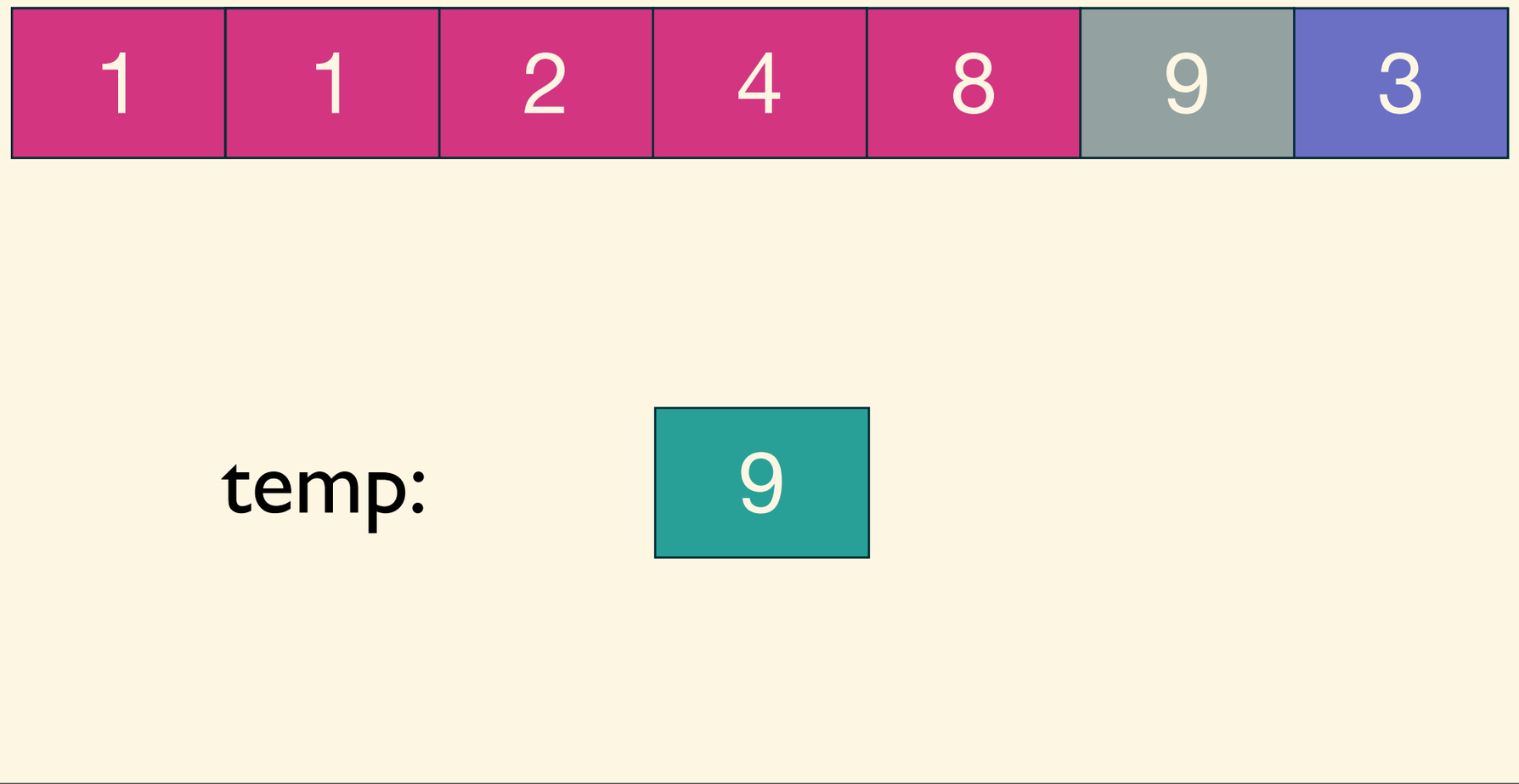
Put back.

1	1	2	4	8	9	3

Enumerate next element.

temp:

Copy the value to temporal variable.



temp:

No element is greater than the current element in sorted part.

temp:

temp:

Put back.

temp:

Put back.

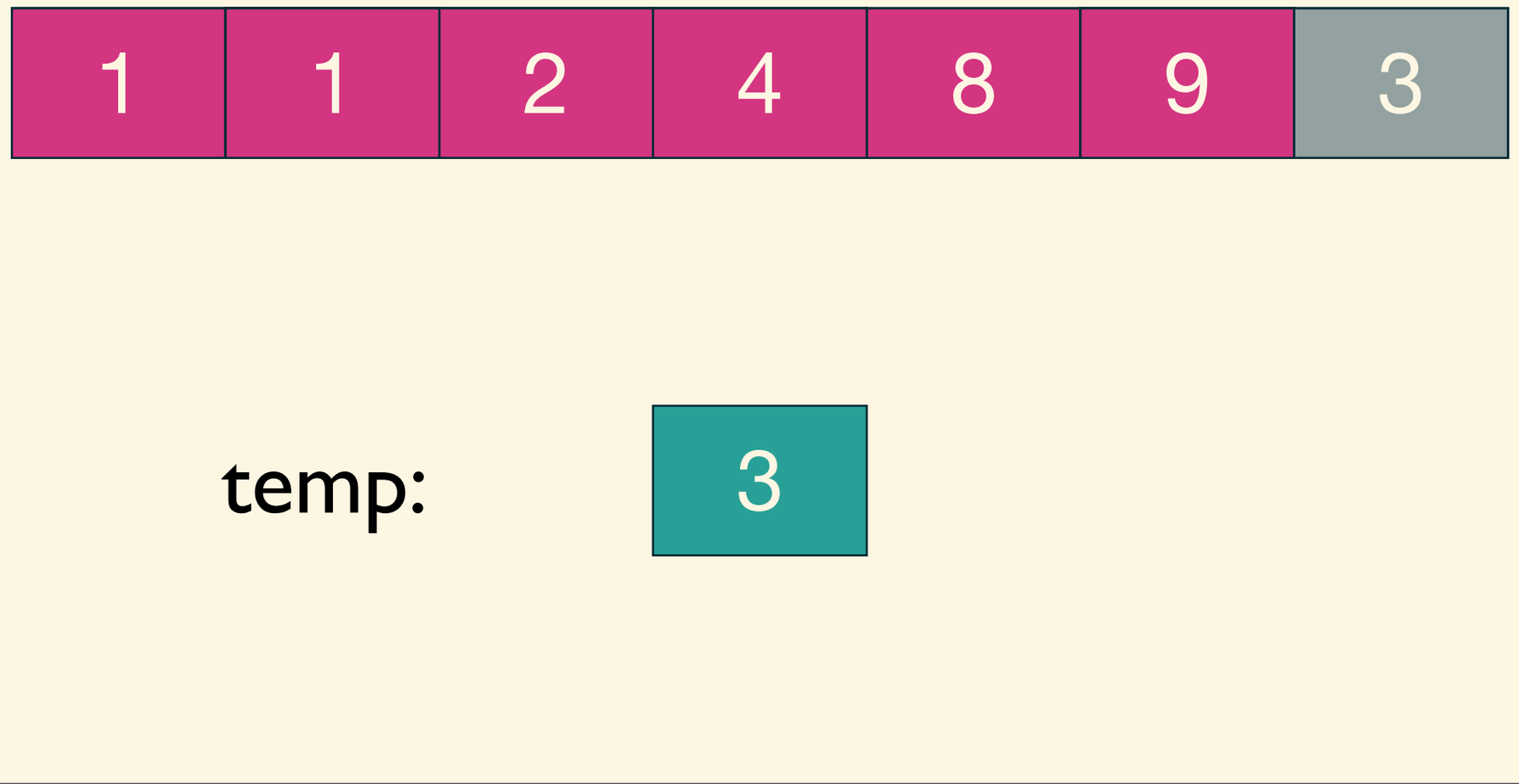
Put back.

1	1	2	4	8	9	3

Enumerate next element.

temp:

Copy the value to temporal variable.



temp:

Find the foremost element great than the current element.

temp: 3

Find the foremost element great than the current element.

temp: 3

Find the foremost element great than the current element.

temp: 3

temp:

Insert the element.

temp:

Insert the element.

Insert the element.

Sort completely!

End