

UCSC Silicon Valley Extension

Advanced C Programming

Radix Sort

Instructor: Radhika Grover

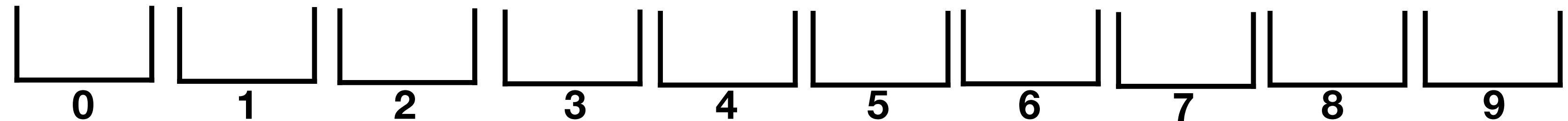
Radix sort using bucket sort

5	5	8	0	9
0	3	2	1	7
8	7	5	0	0
9	0	2	0	1
3	5	8	0	5
2	5	8	1	3
7	2	2	1	6
9	4	0	8	4

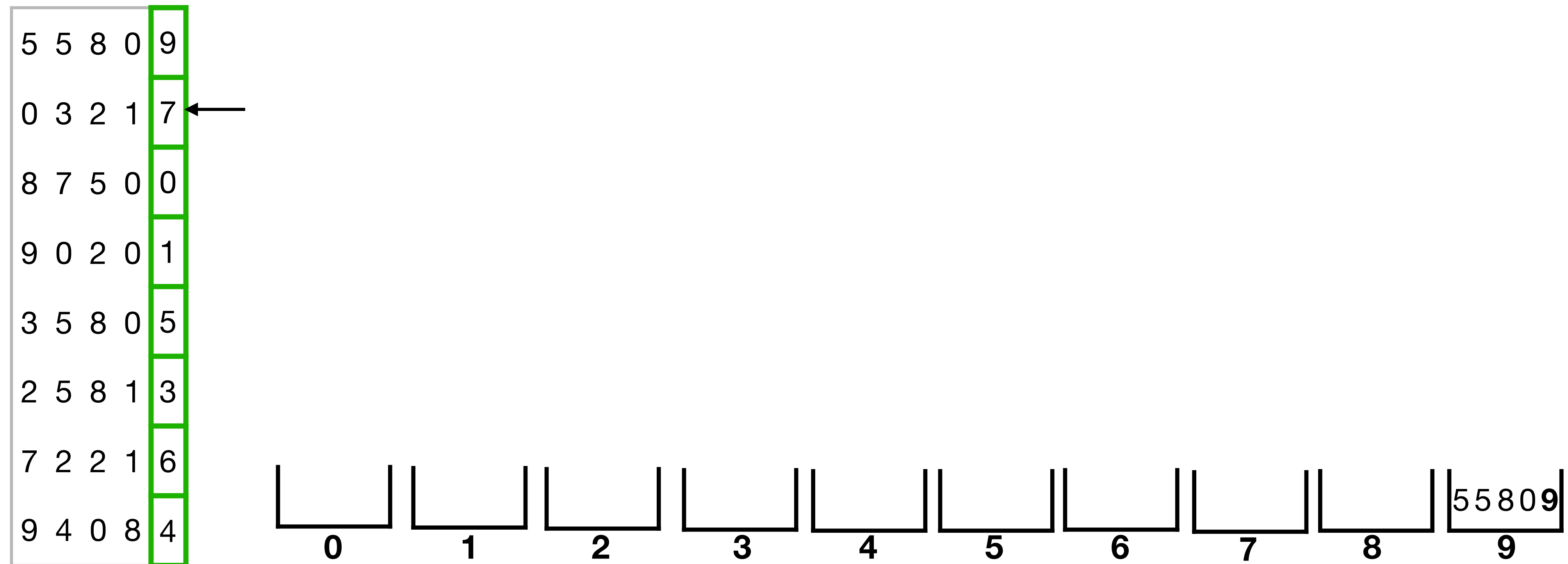


Radix sort using bucket sort

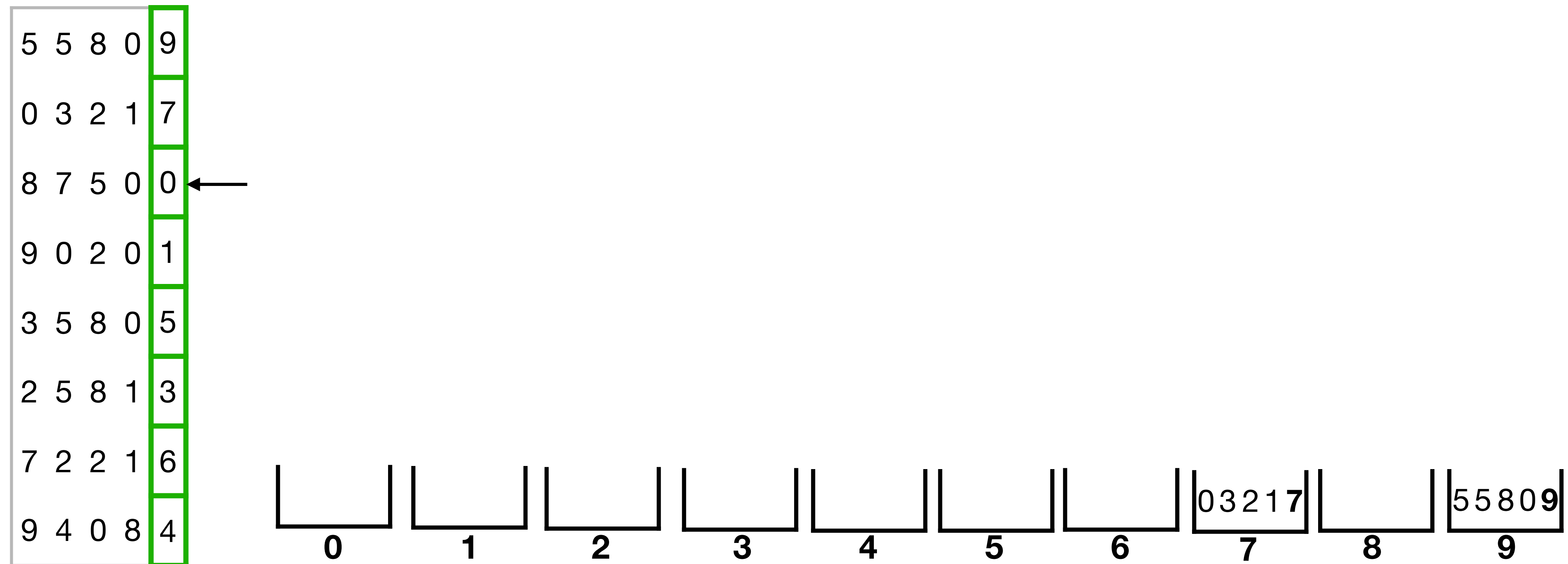
5	5	8	0	9
0	3	2	1	7
8	7	5	0	0
9	0	2	0	1
3	5	8	0	5
2	5	8	1	3
7	2	2	1	6
9	4	0	8	4



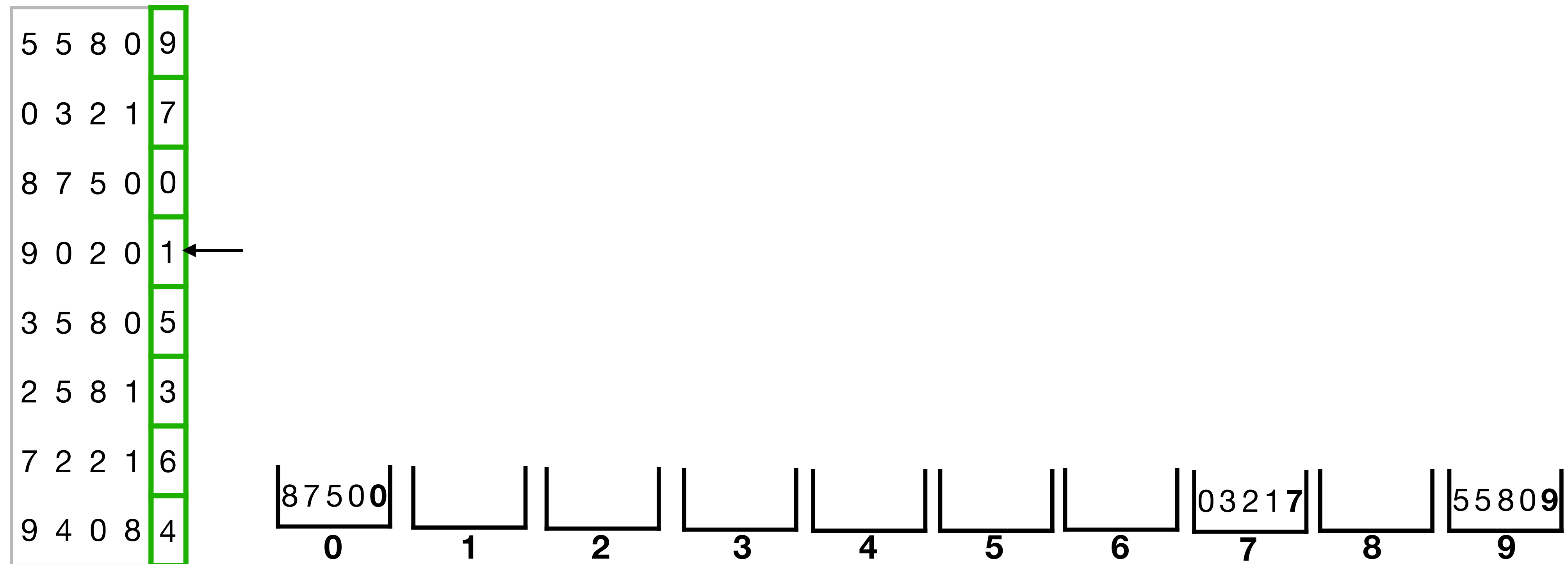
Radix sort using bucket sort



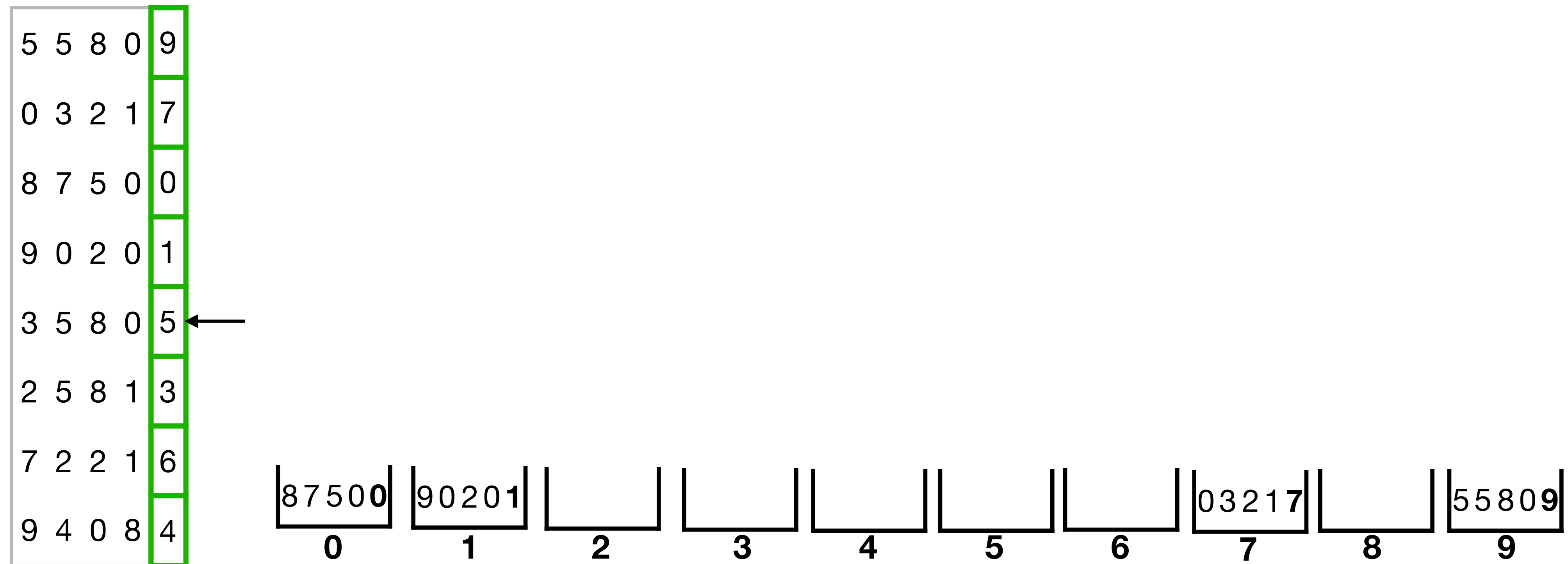
Radix sort using bucket sort



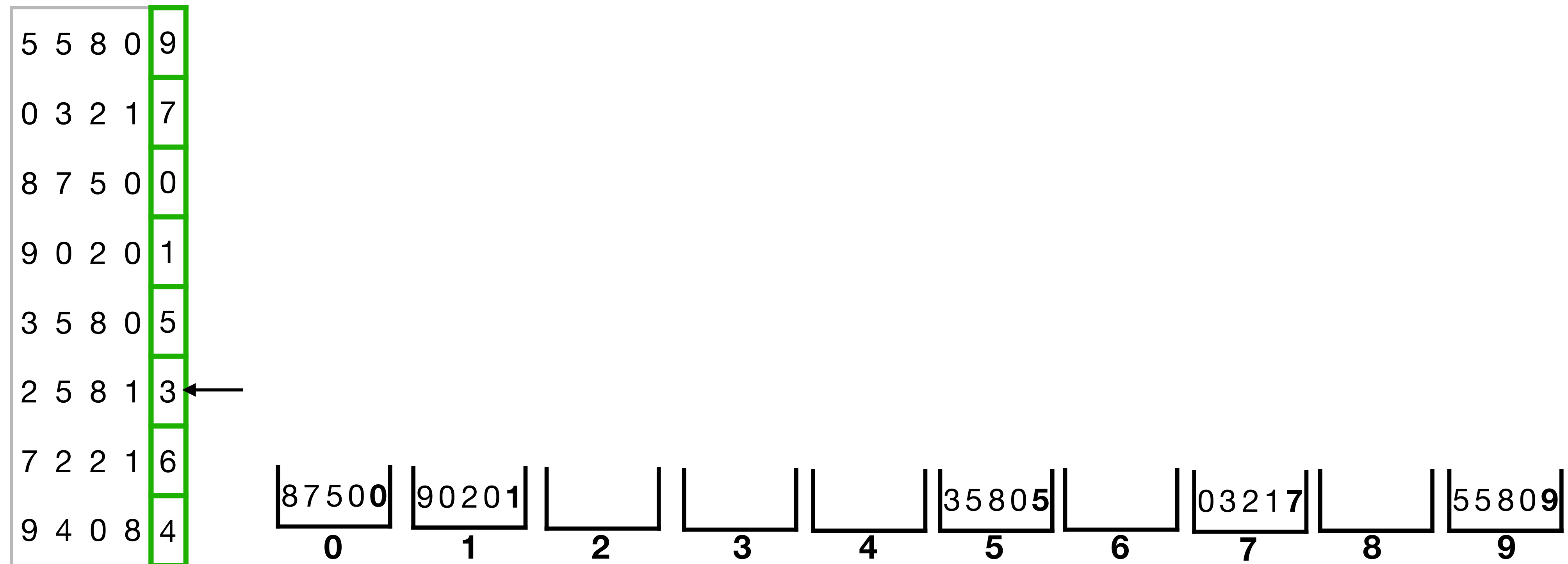
Radix sort using bucket sort



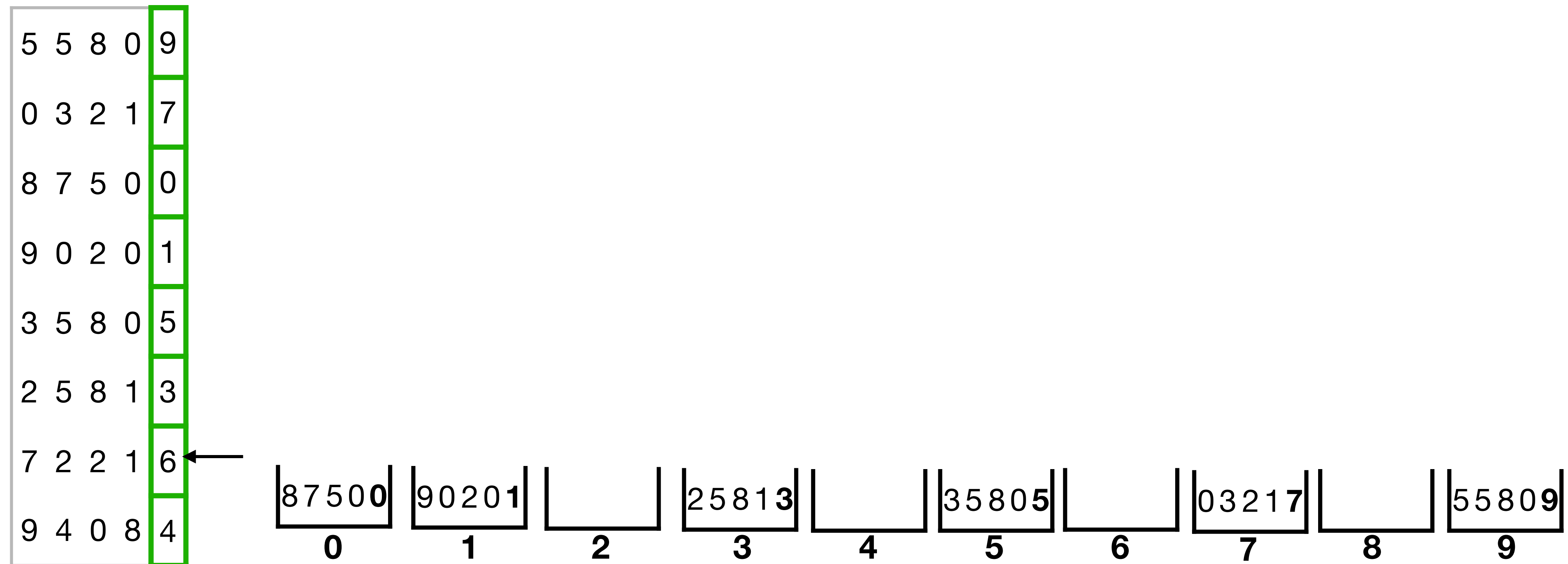
Radix sort using bucket sort



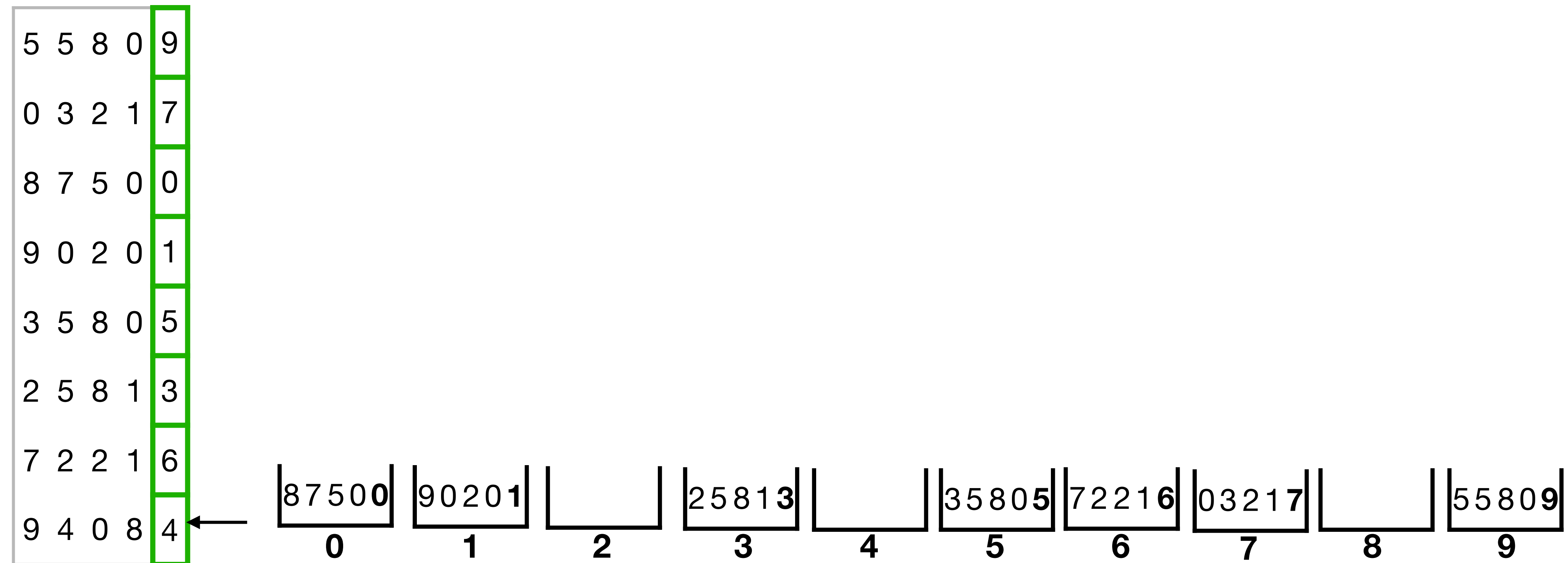
Radix sort using bucket sort



Radix sort using bucket sort



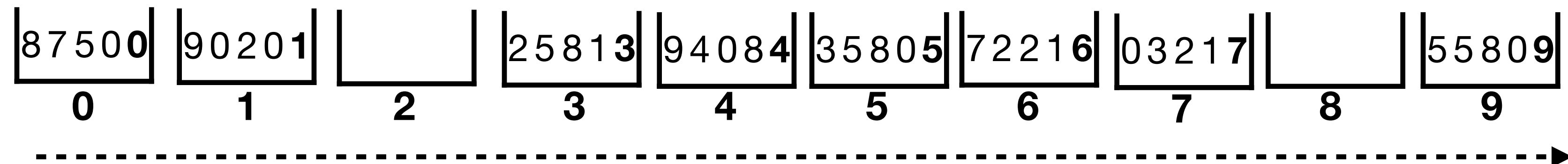
Radix sort using bucket sort



Radix sort using bucket sort

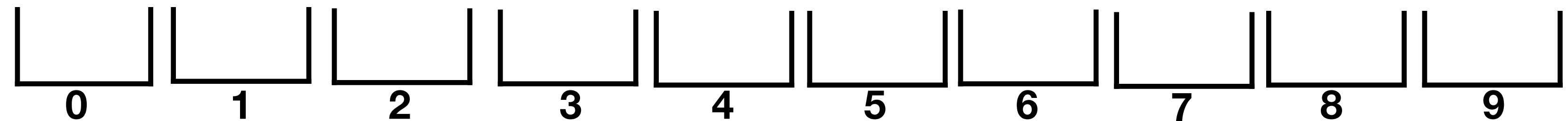
5	5	8	0	9
0	3	2	1	7
8	7	5	0	0
9	0	2	0	1
3	5	8	0	5
2	5	8	1	3
7	2	2	1	6
9	4	0	8	4

Store back into array in the order bucket 0 to 9



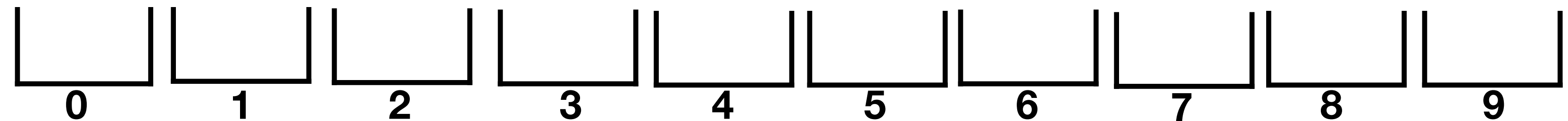
Radix sort using bucket sort

8	7	5	0	0
9	0	2	0	1
2	5	8	1	3
9	4	0	8	4
3	5	8	0	5
7	2	2	1	6
0	3	2	1	7
5	5	8	0	9

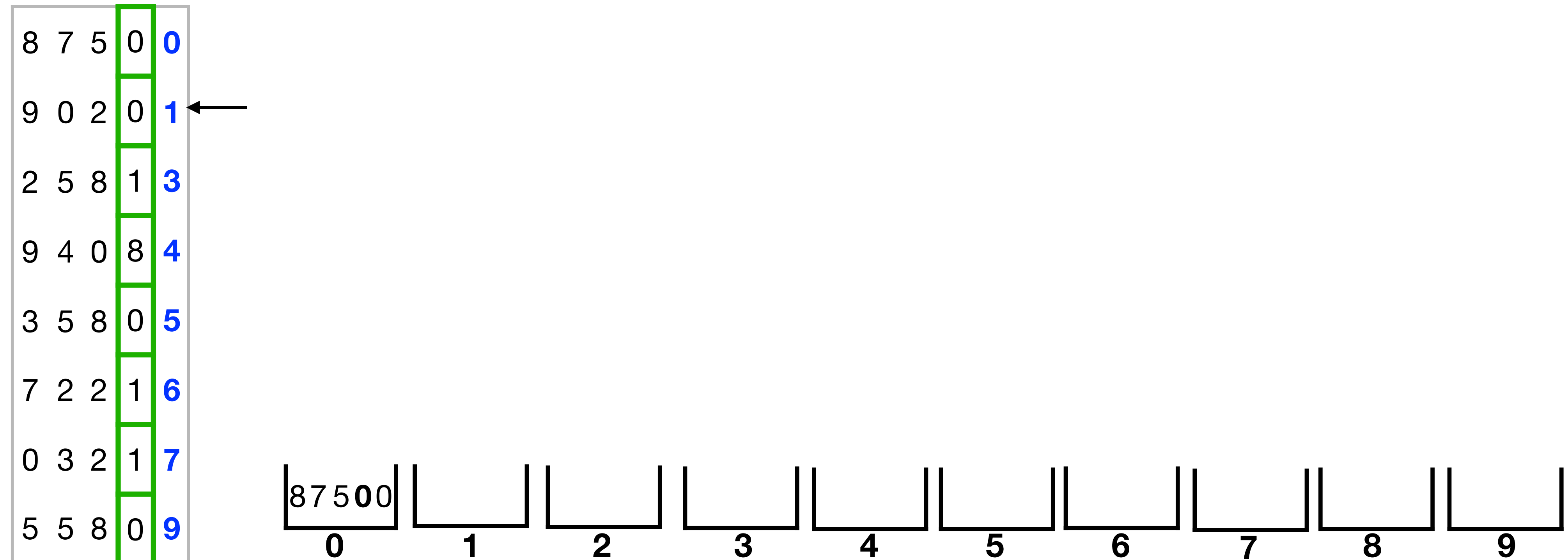


Radix sort using bucket

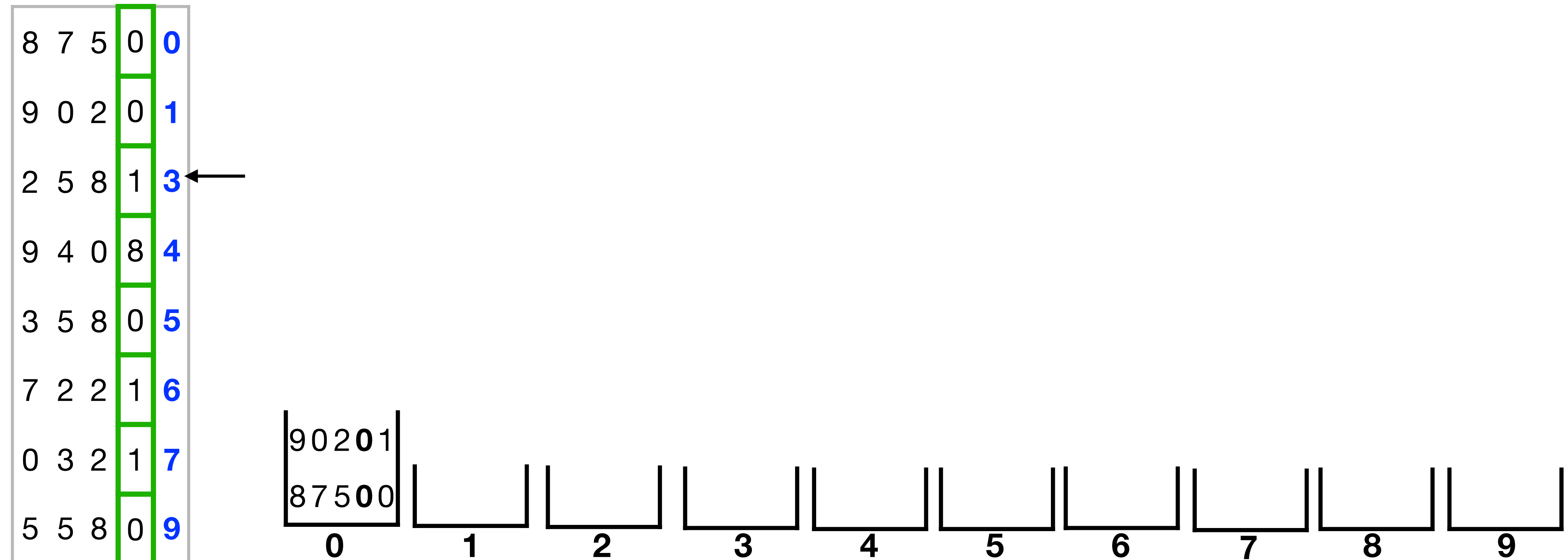
8	7	5	0	0
9	0	2	0	1
2	5	8	1	3
9	4	0	8	4
3	5	8	0	5
7	2	2	1	6
0	3	2	1	7
5	5	8	0	9



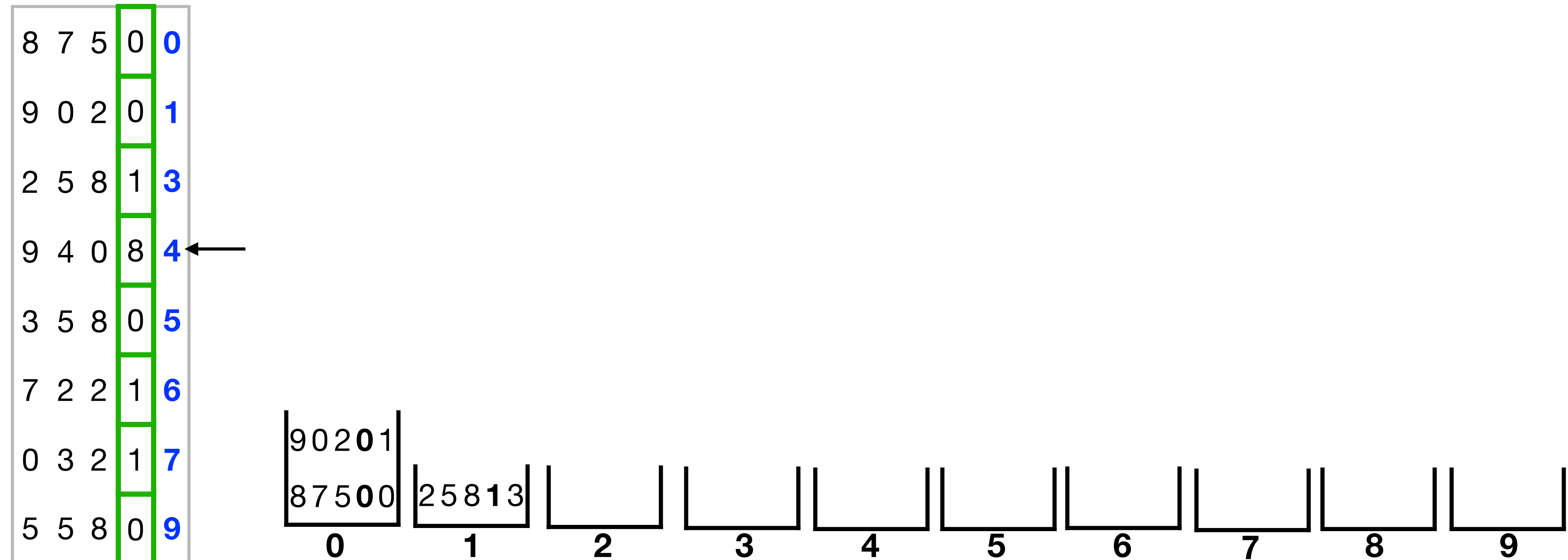
Radix sort using bucket sort



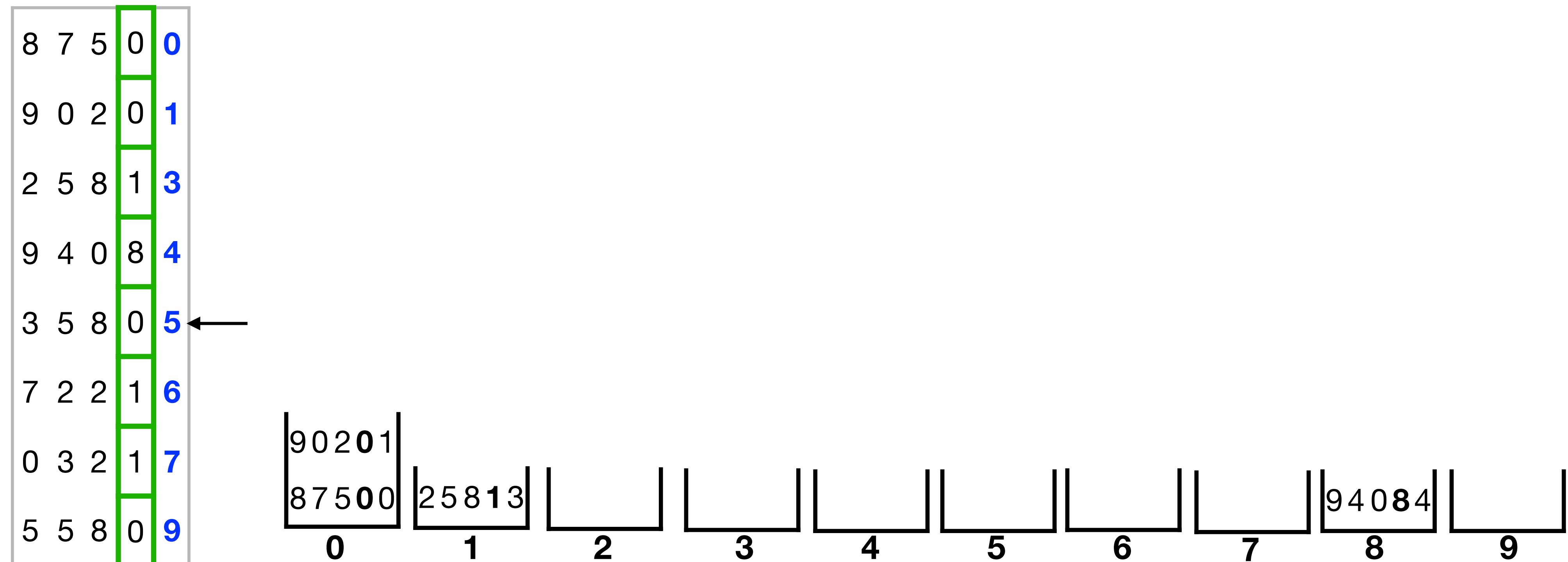
Radix sort using bucket sort



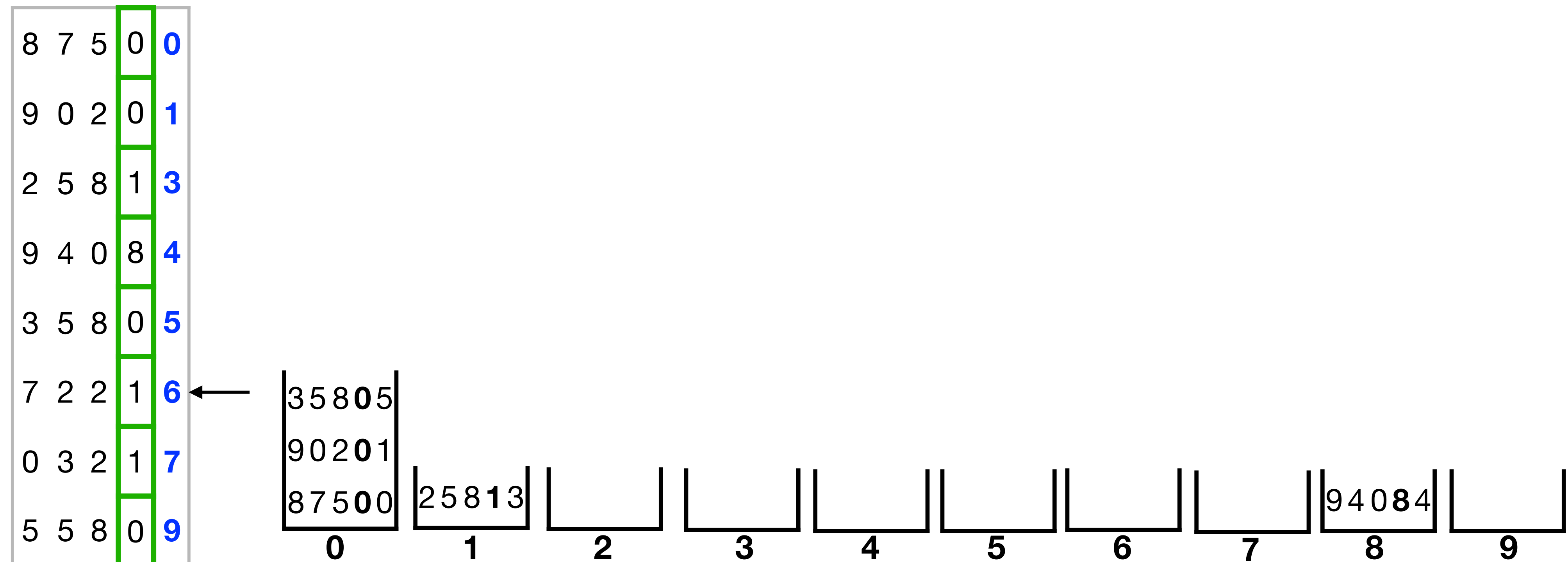
Radix sort using bucket sort



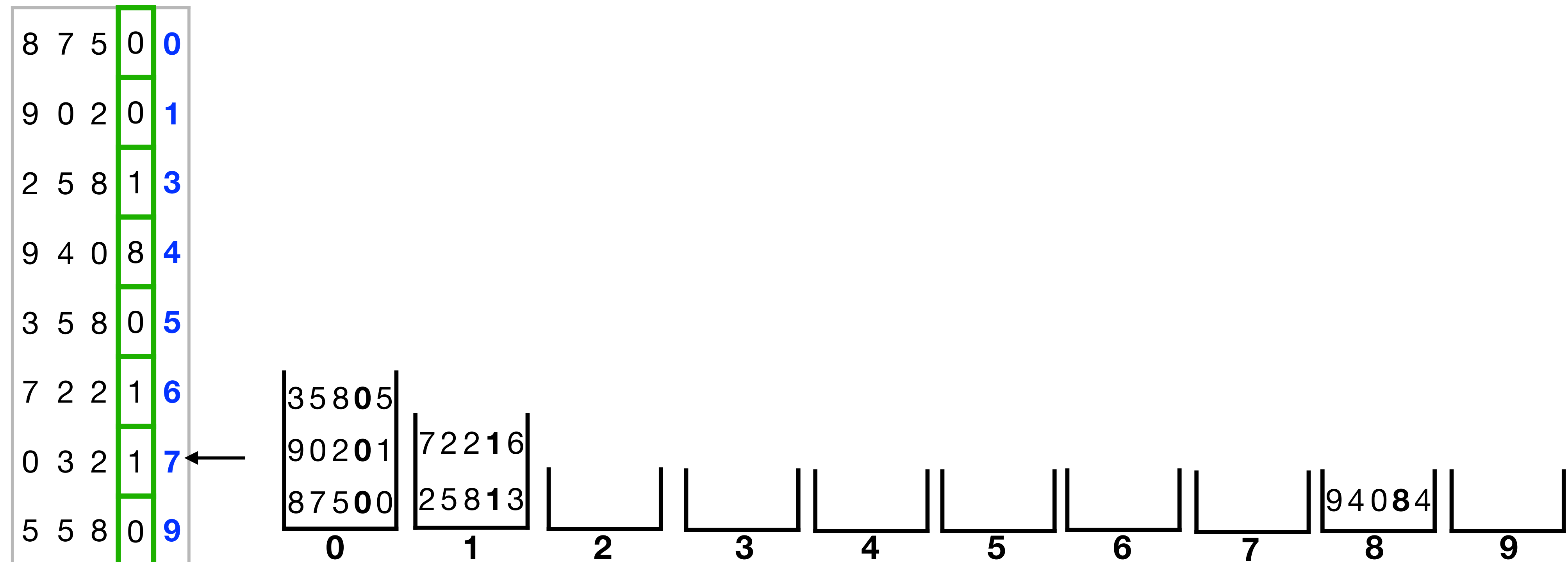
Radix sort using bucket sort



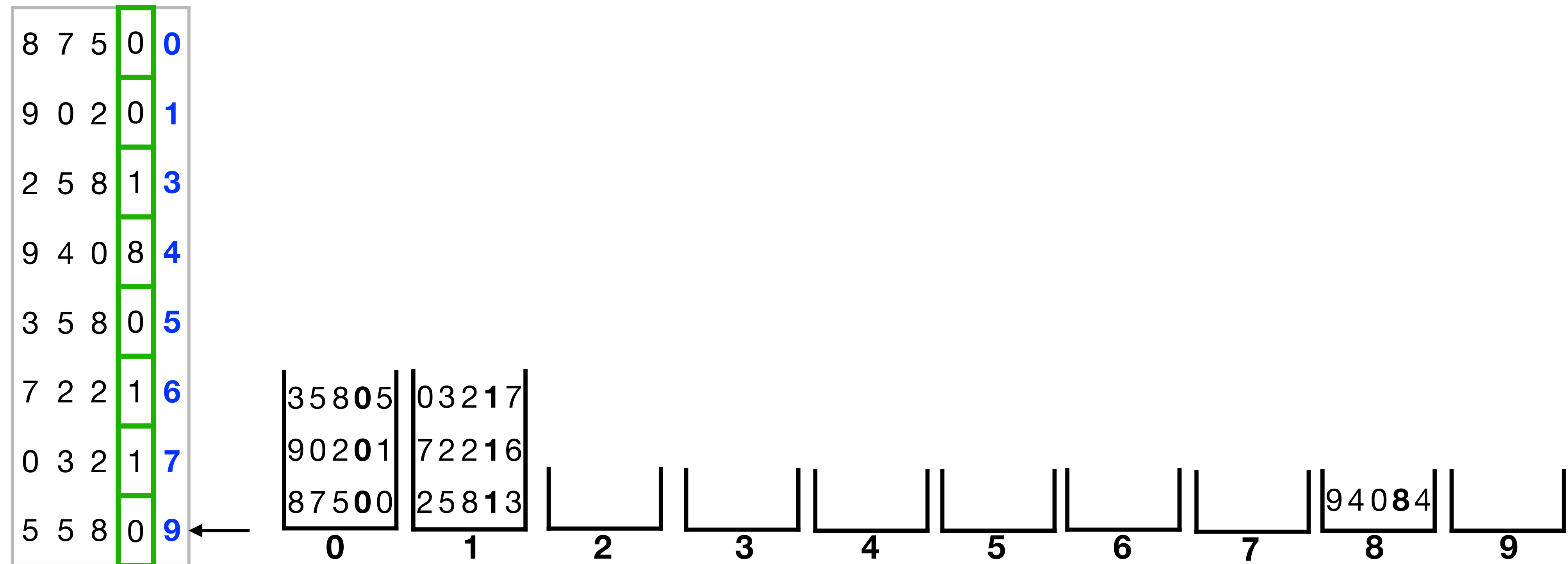
Radix sort using bucket sort



Radix sort using bucket sort

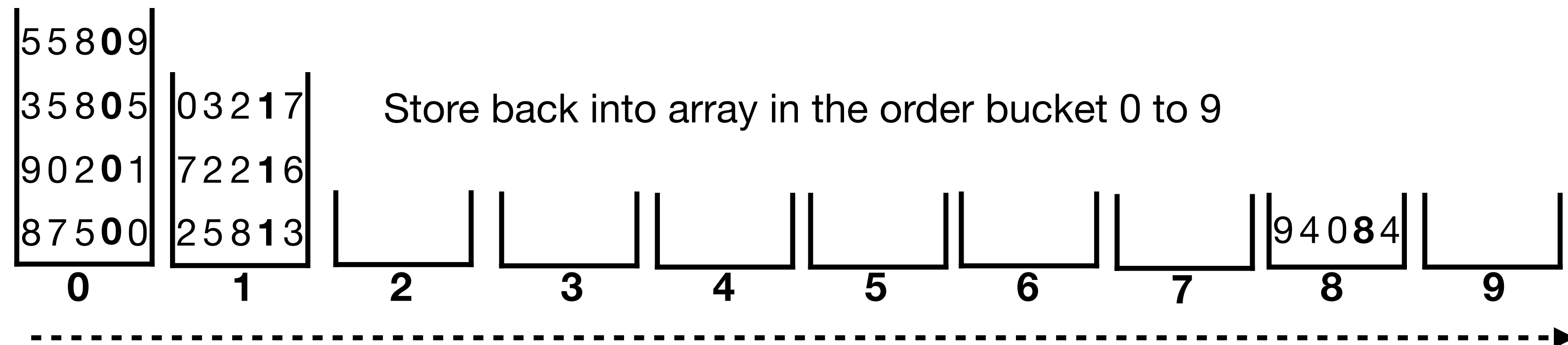


Radix sort using bucket sort



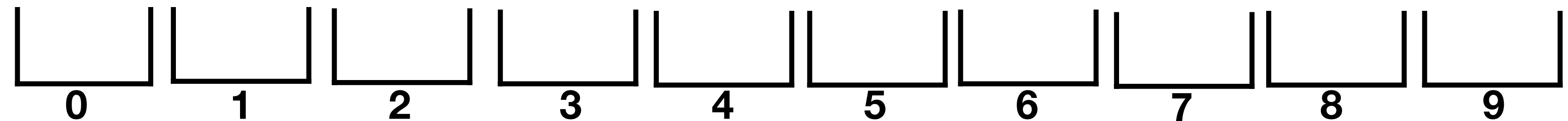
Radix sort using bucket sort

8	7	5	0	0
9	0	2	0	1
2	5	8	1	3
9	4	0	8	4
3	5	8	0	5
7	2	2	1	6
0	3	2	1	7
5	5	8	0	9



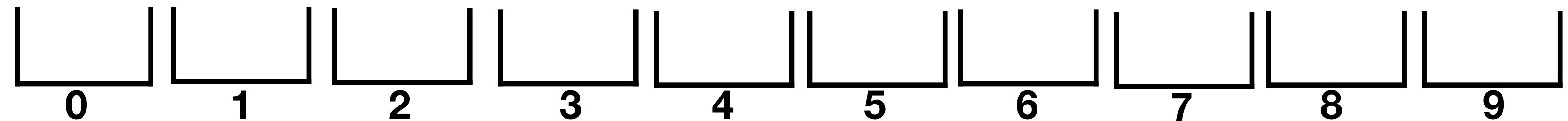
Radix sort using bucket

8	7	5	0	0
9	0	2	0	1
3	5	8	0	5
5	5	8	0	9
2	5	8	1	3
7	2	2	1	6
0	3	2	1	7
9	4	0	8	4



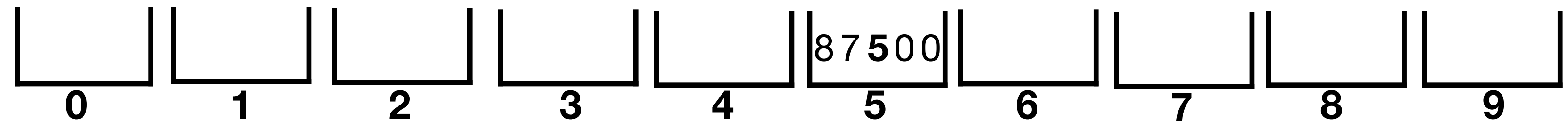
Radix sort using bucket sort

8	7	5	0	0
9	0	2	0	1
3	5	8	0	5
5	5	8	0	9
2	5	8	1	3
7	2	2	1	6
0	3	2	1	7
9	4	0	8	4

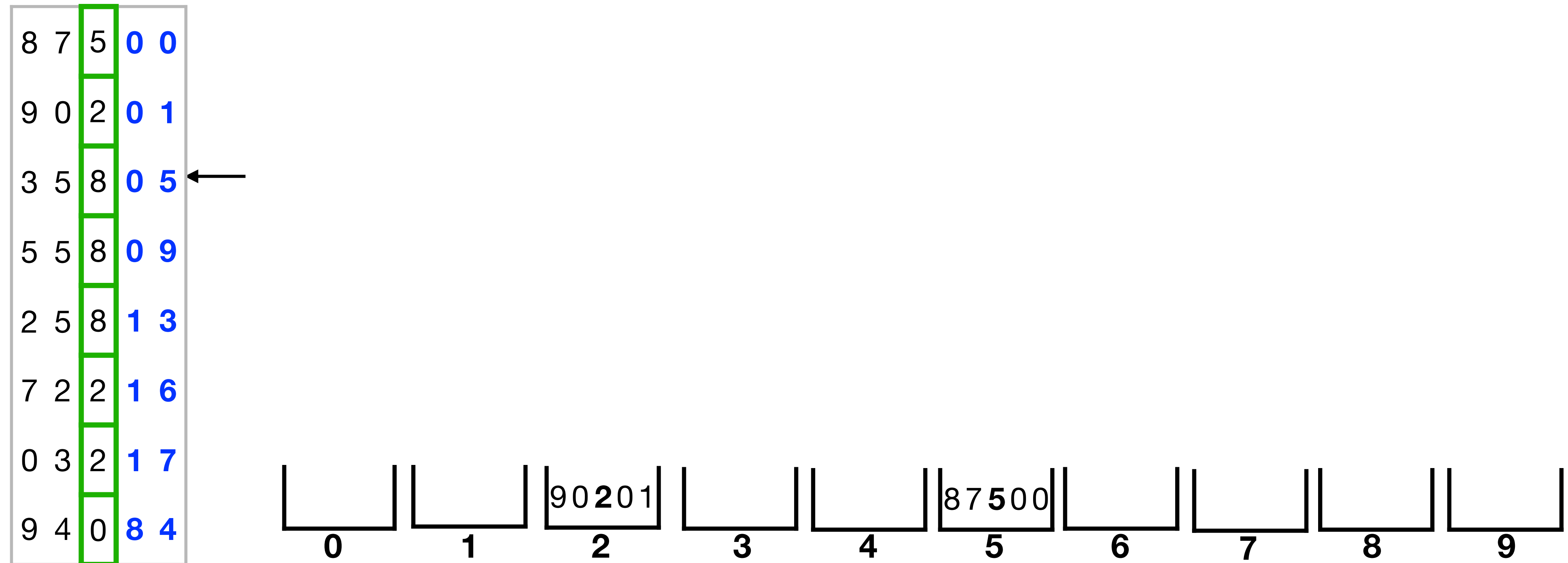


Radix sort using bucket sort

8	7	5	0	0
9	0	2	0	1
3	5	8	0	5
5	5	8	0	9
2	5	8	1	3
7	2	2	1	6
0	3	2	1	7
9	4	0	8	4

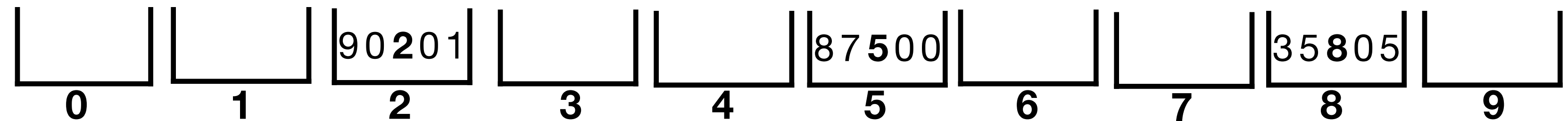


Radix sort using bucket sort

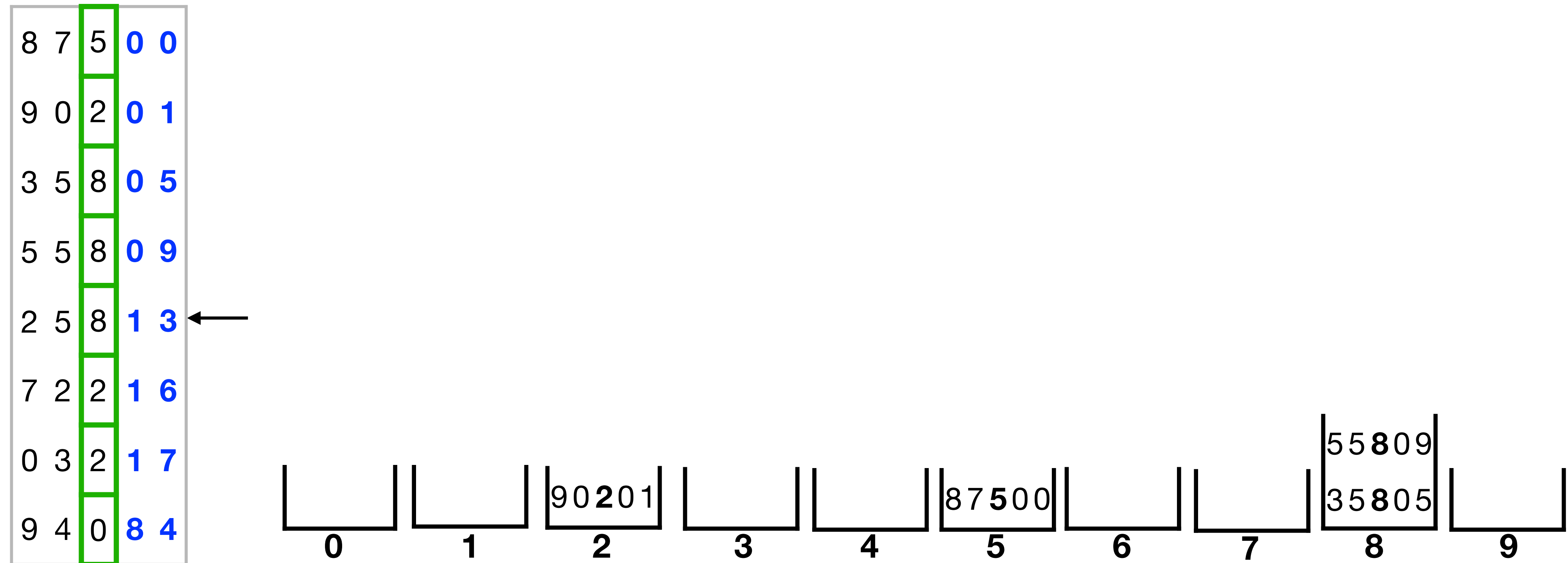


Radix sort using bucket sort

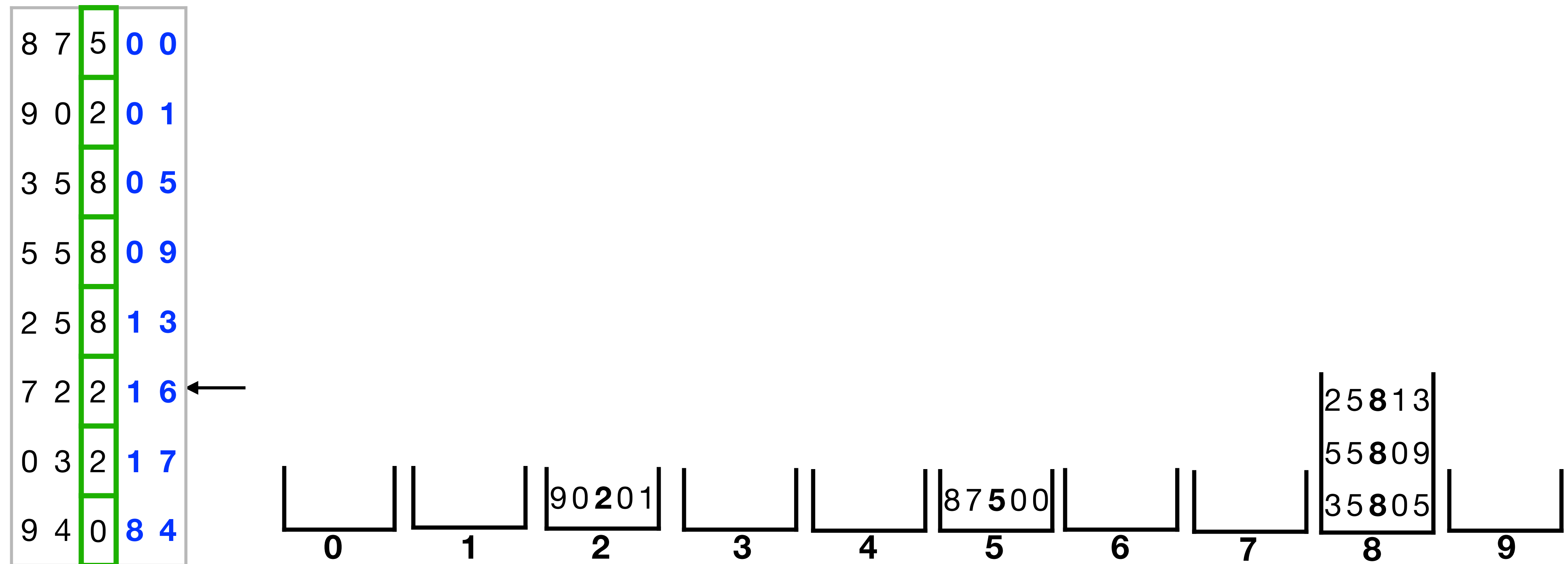
8	7	5	0	0
9	0	2	0	1
3	5	8	0	5
5	5	8	0	9
2	5	8	1	3
7	2	2	1	6
0	3	2	1	7
9	4	0	8	4



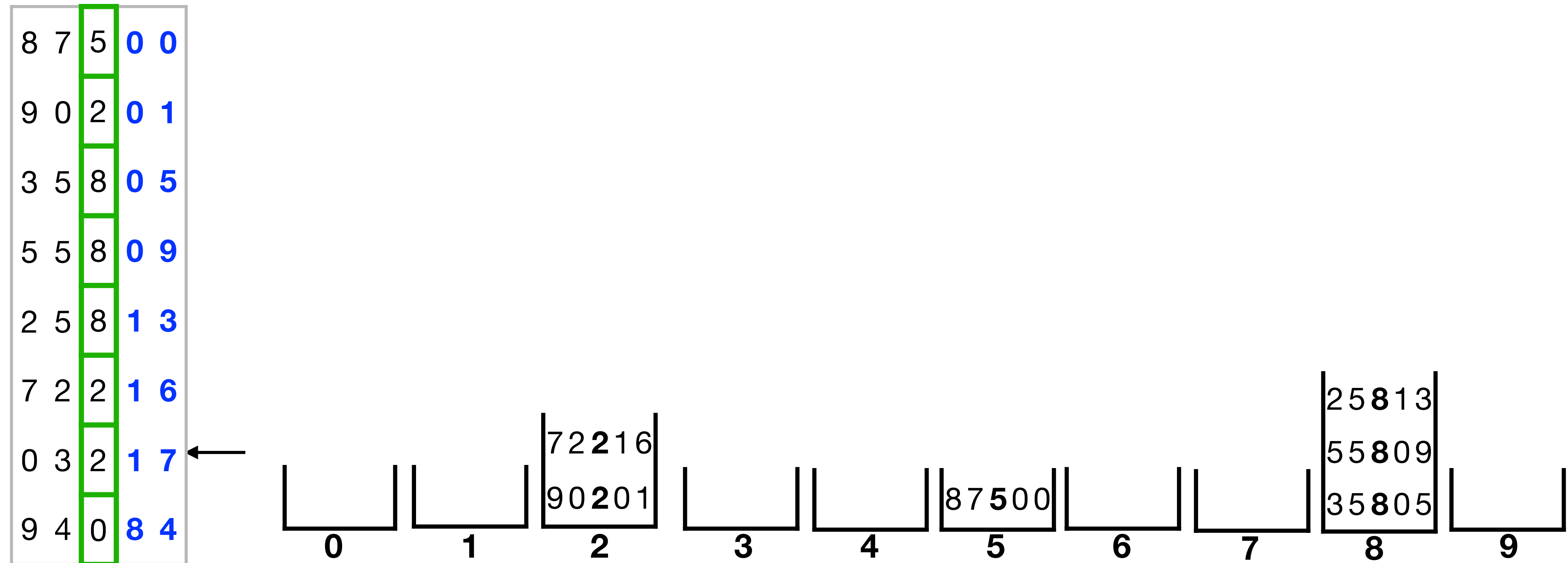
Radix sort using bucket sort



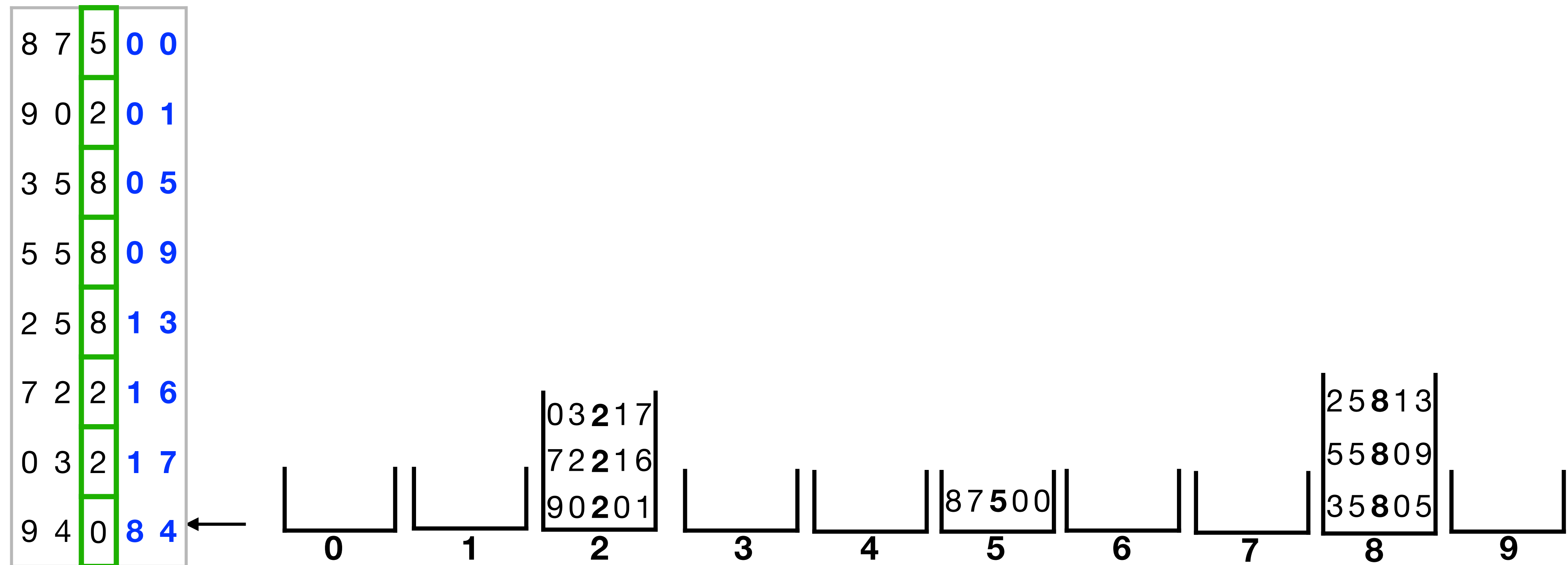
Radix sort using bucket



Radix sort using bucket



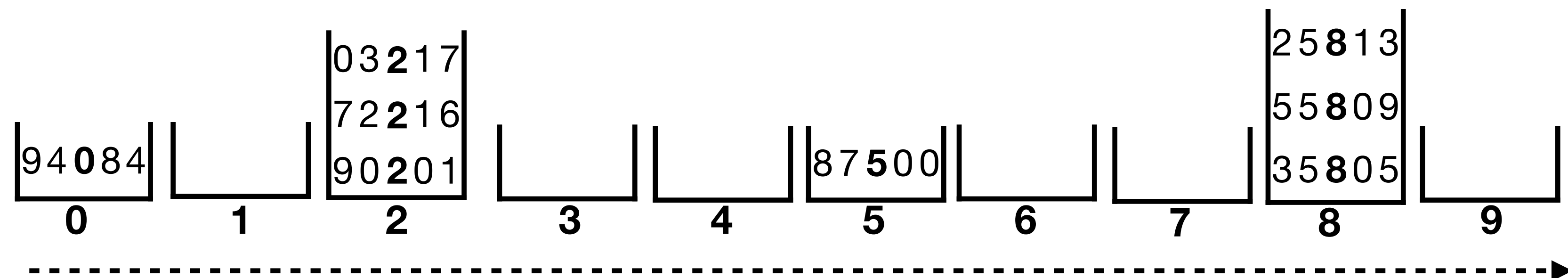
Radix sort using bucket



Radix sort using bucket sort

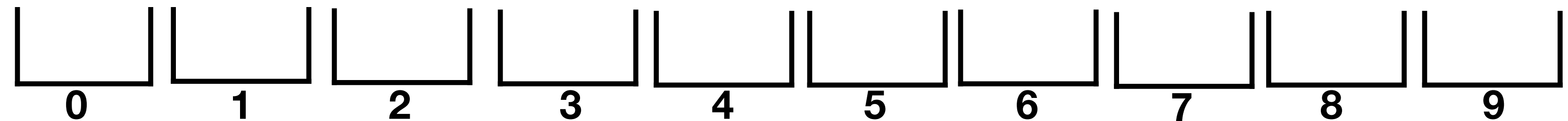
8	7	5	0	0
9	0	2	0	1
3	5	8	0	5
5	5	8	0	9
2	5	8	1	3
7	2	2	1	6
0	3	2	1	7
9	4	0	8	4

Store back into array in the order bucket 0 to 9



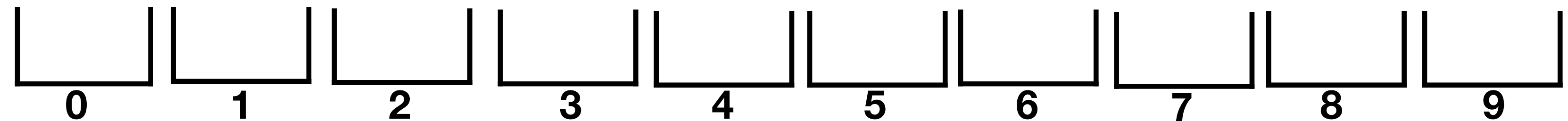
Radix sort using bucket sort

9	4	0	8	4
9	0	2	0	1
7	2	2	1	6
0	3	2	1	7
8	7	5	0	0
3	5	8	0	5
5	5	8	0	9
2	5	8	1	3

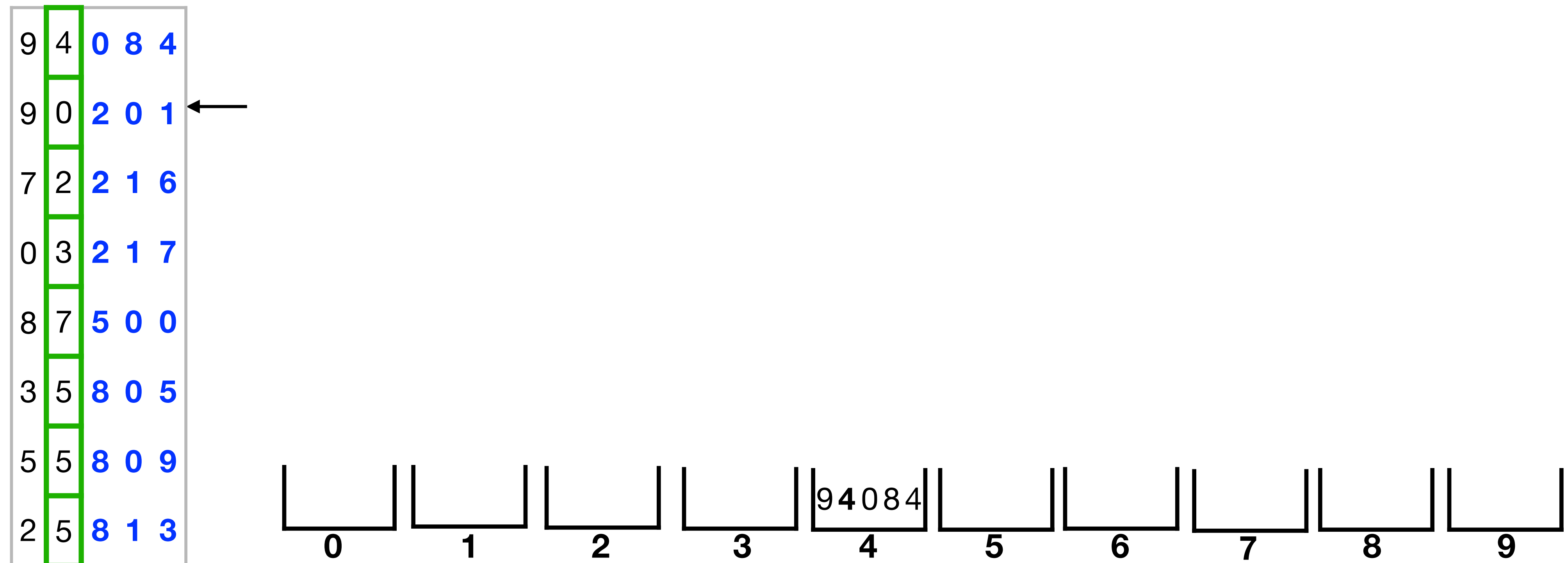


Radix sort using bucket sort

9	4	0	8	4
9	0	2	0	1
7	2	2	1	6
0	3	2	1	7
8	7	5	0	0
3	5	8	0	5
5	5	8	0	9
2	5	8	1	3



Radix sort using bucket sort

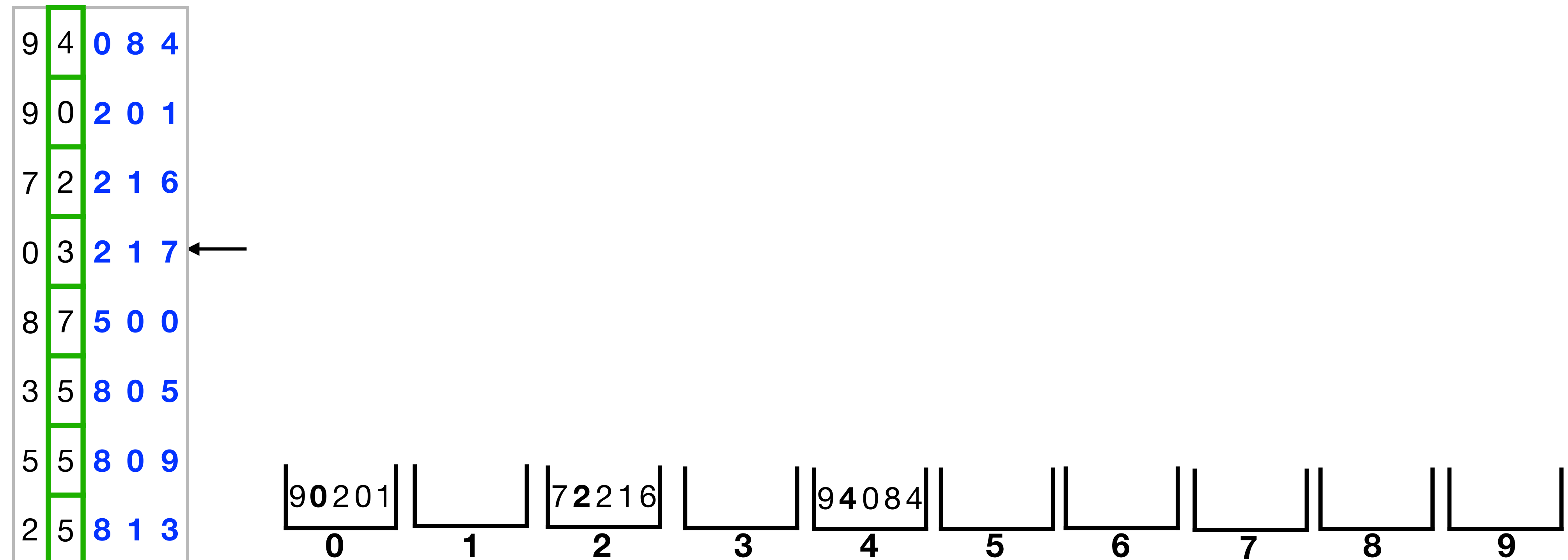


Radix sort using bucket sort

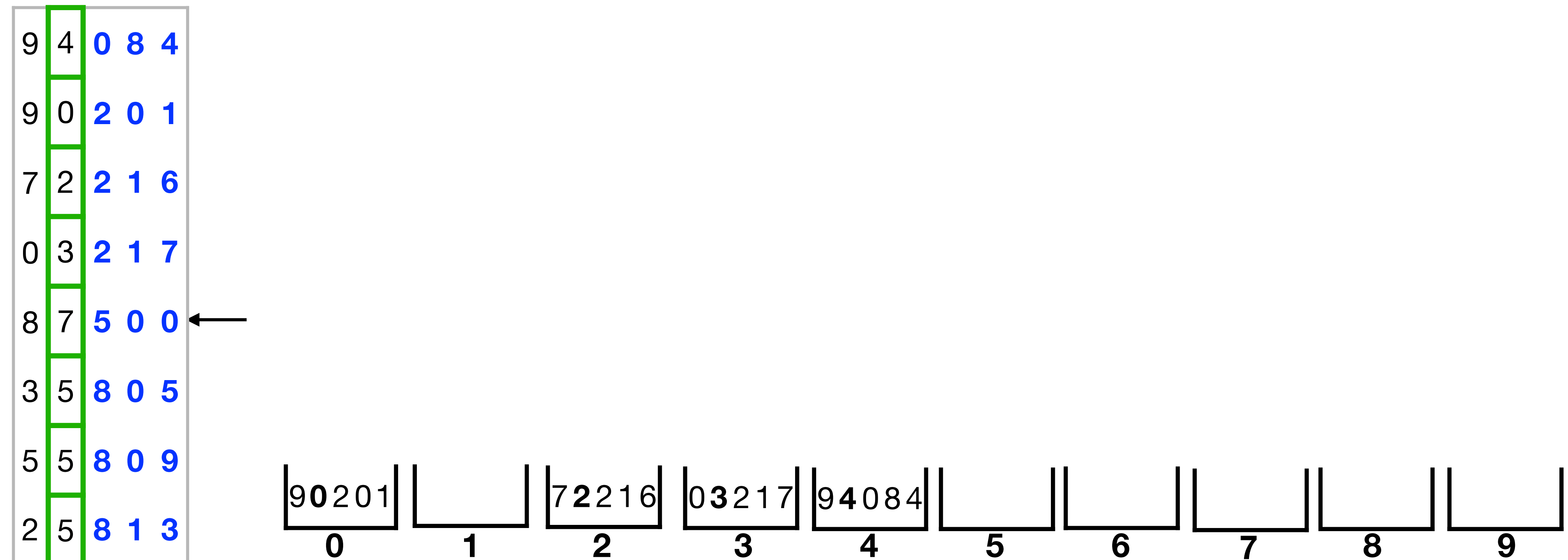
9	4	0	8	4
9	0	2	0	1
7	2	2	1	6
0	3	2	1	7
8	7	5	0	0
3	5	8	0	5
5	5	8	0	9
2	5	8	1	3

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0	1	2	3	4	5	6	7	8	9

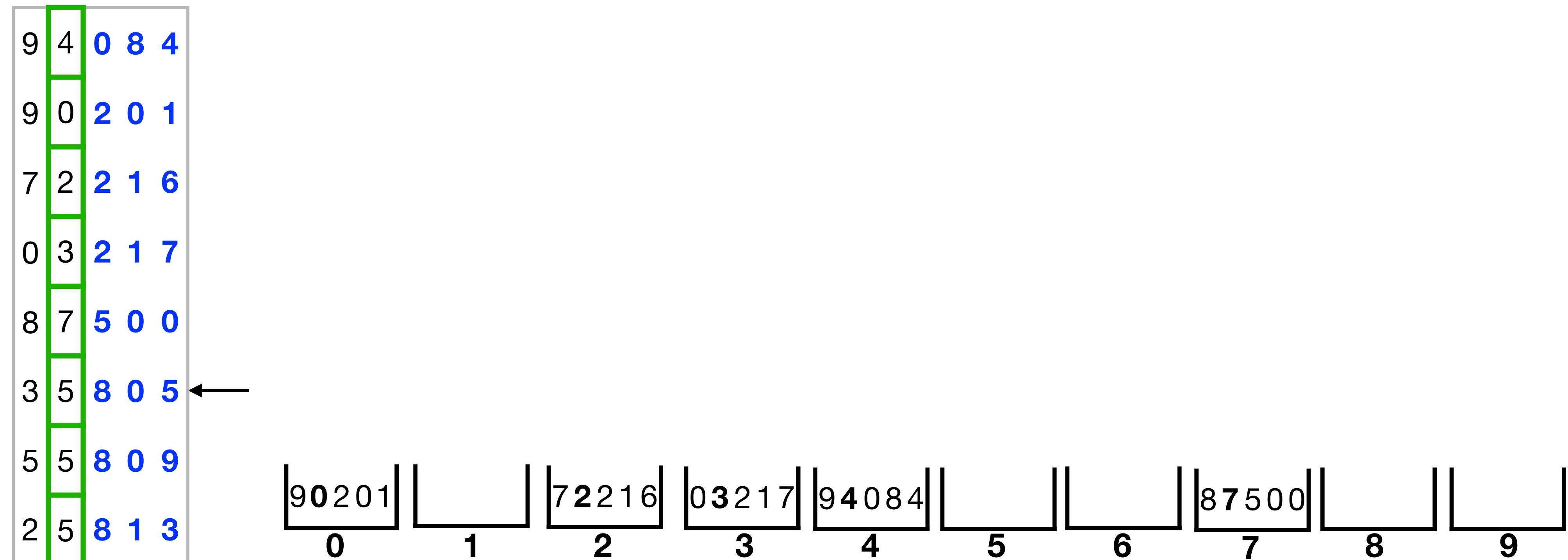
Radix sort using bucket sort



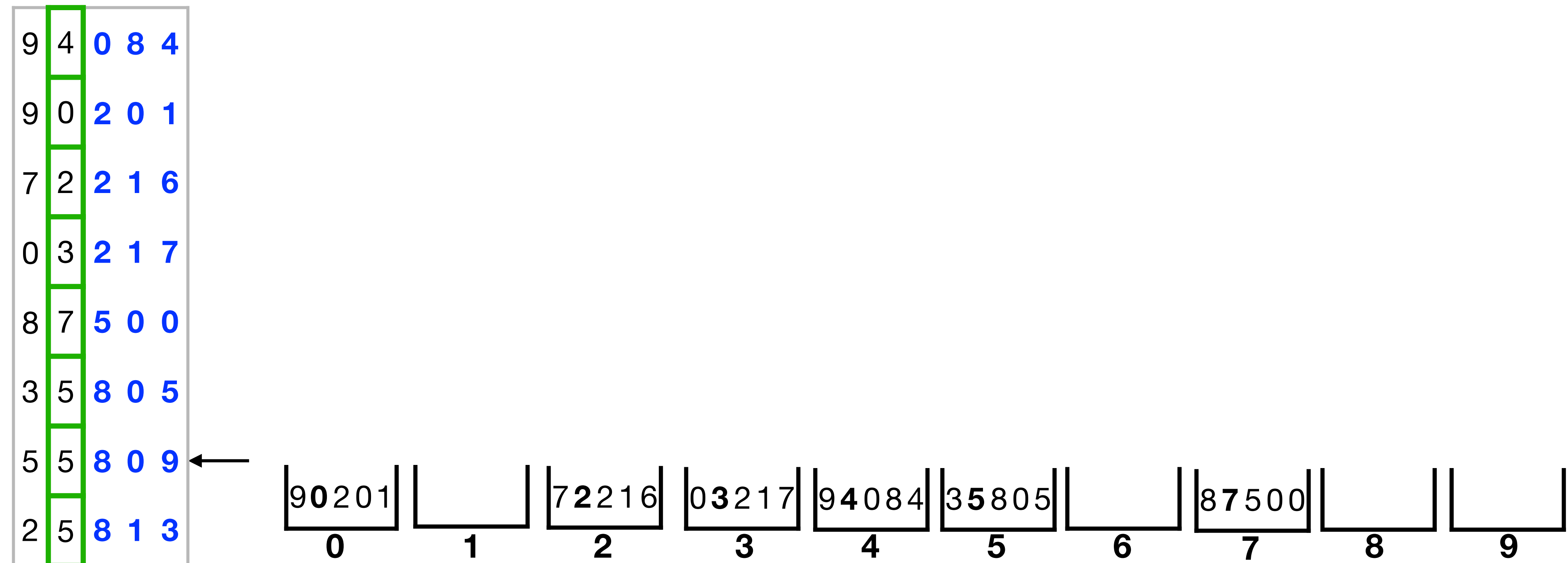
Radix sort using bucket sort



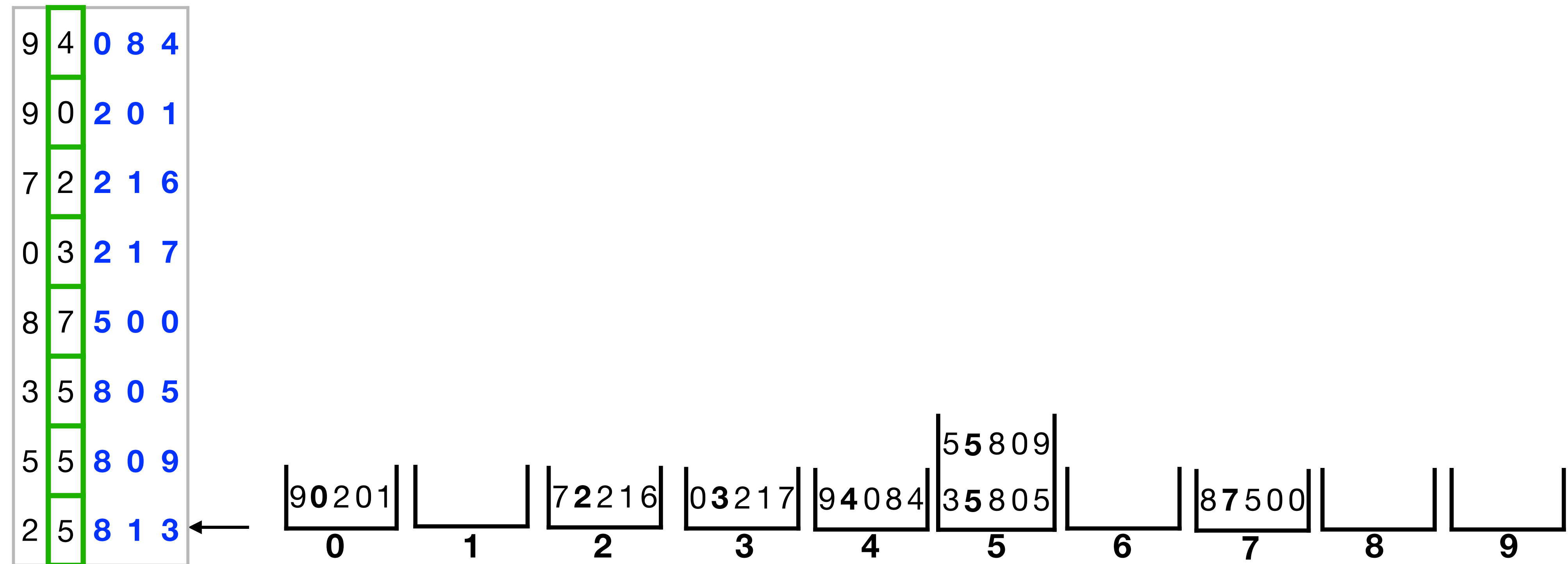
Radix sort using bucket sort



Radix sort using bucket sort



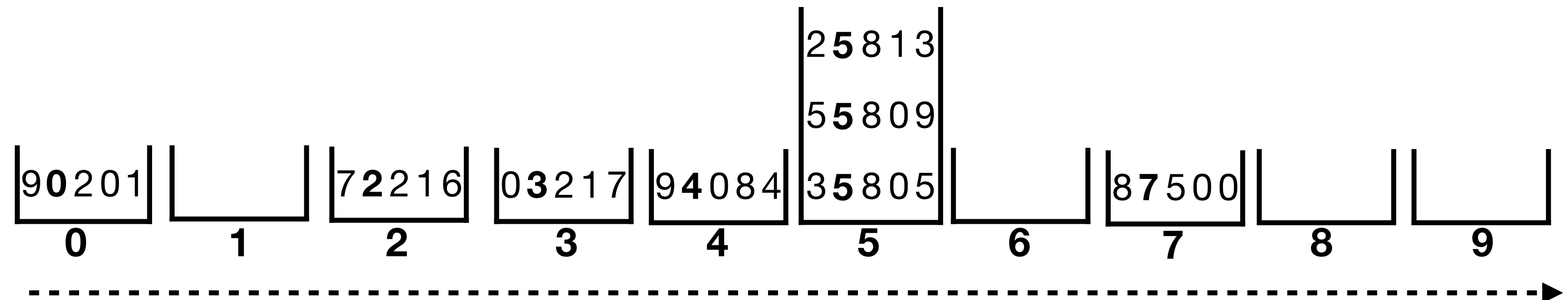
Radix sort using bucket sort



Radix sort using bucket sort

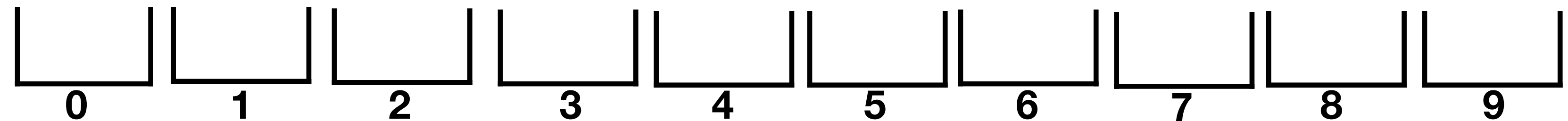
9	4	0	8	4
9	0	2	0	1
7	2	2	1	6
0	3	2	1	7
8	7	5	0	0
3	5	8	0	5
5	5	8	0	9
2	5	8	1	3

Store back into array in the order bucket 0 to 9



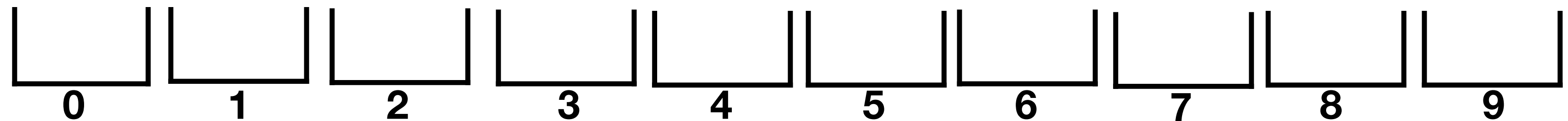
Radix sort using bucket sort

9	0	2	0	1
7	2	2	1	6
0	3	2	1	7
9	4	0	8	4
3	5	8	0	5
5	5	8	0	9
2	5	8	1	3
8	7	5	0	0



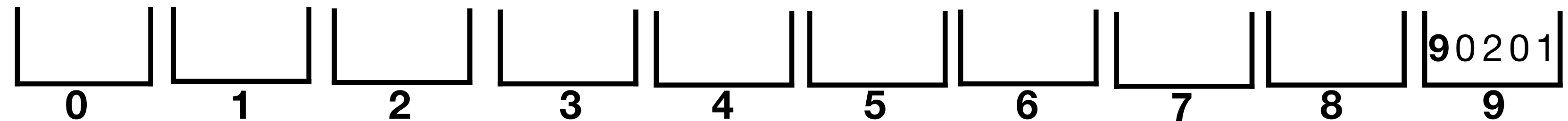
Radix sort using bucket sort

9	0	2	0	1
7	2	2	1	6
0	3	2	1	7
9	4	0	8	4
3	5	8	0	5
5	5	8	0	9
2	5	8	1	3
8	7	5	0	0



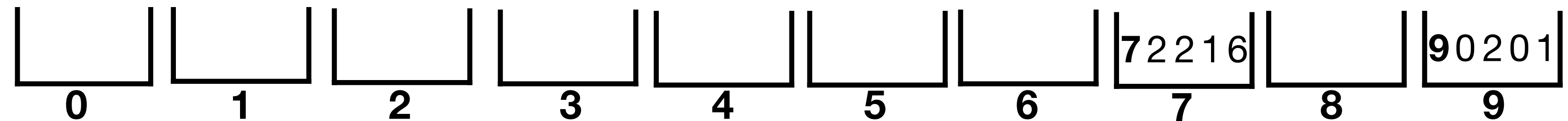
Radix sort using bucket sort

9	0	2	0	1
7	2	2	1	6
0	3	2	1	7
9	4	0	8	4
3	5	8	0	5
5	5	8	0	9
2	5	8	1	3
8	7	5	0	0

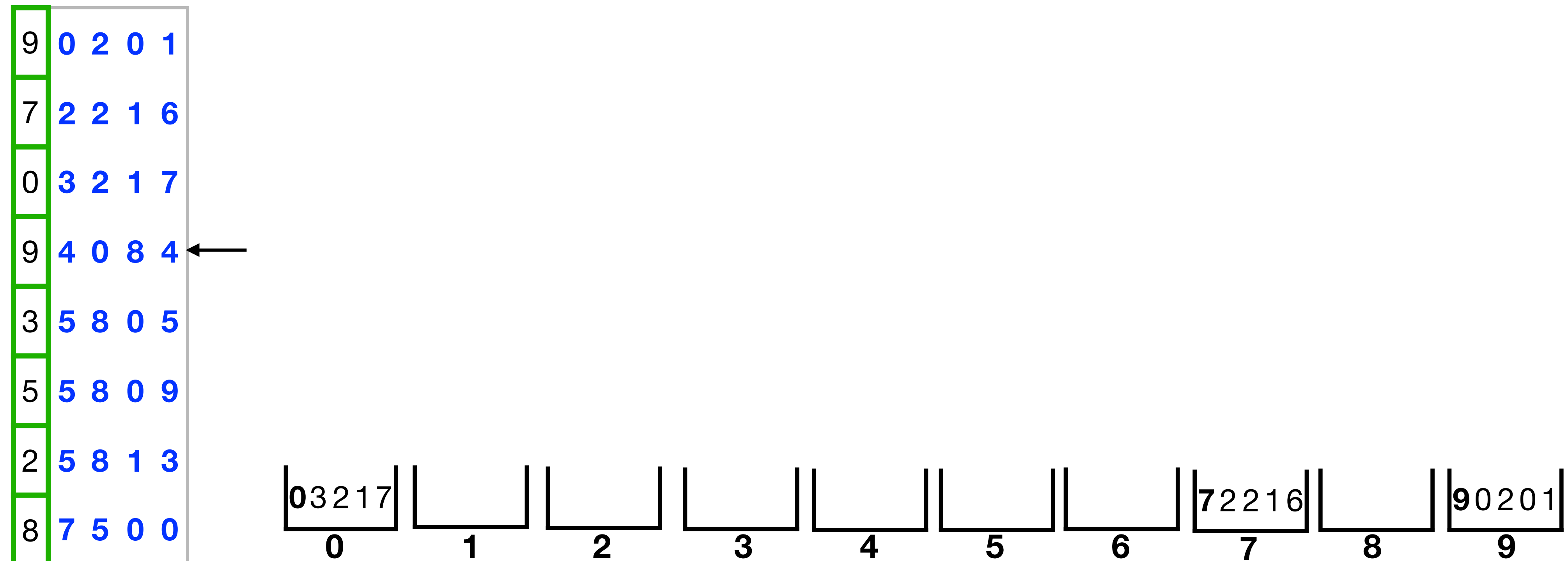


Radix sort using bucket sort

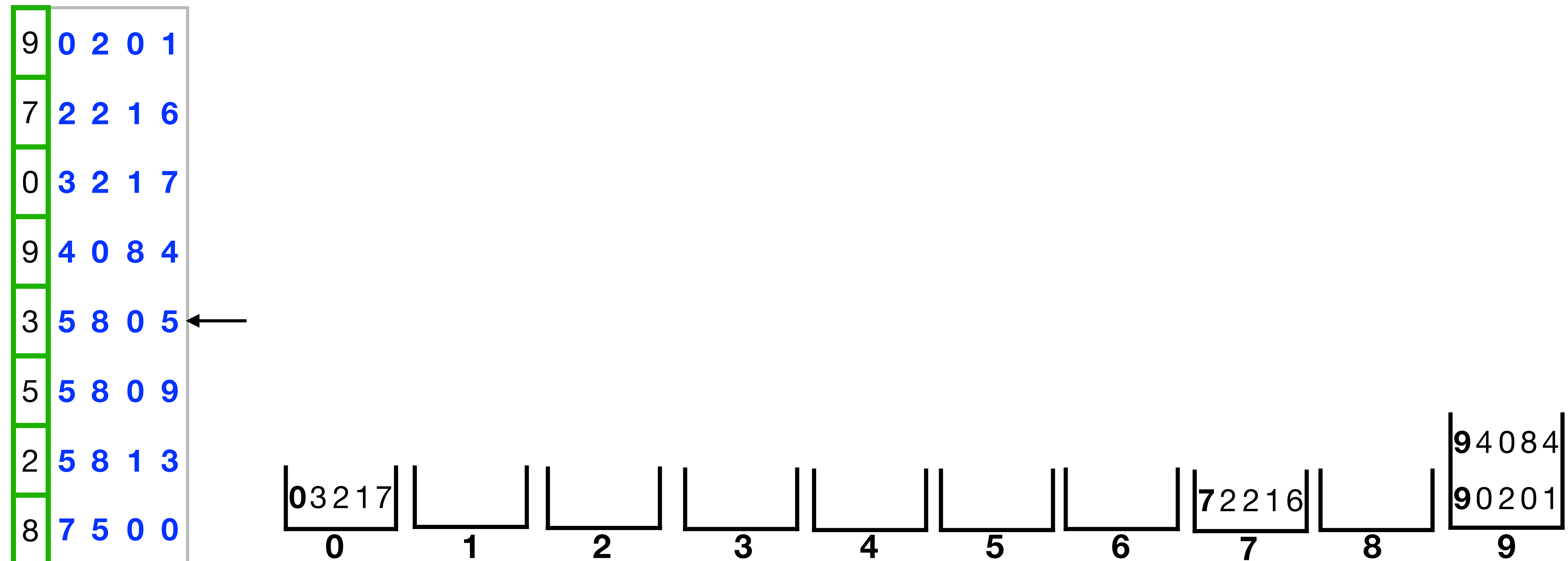
9	0	2	0	1
7	2	2	1	6
0	3	2	1	7
9	4	0	8	4
3	5	8	0	5
5	5	8	0	9
2	5	8	1	3
8	7	5	0	0



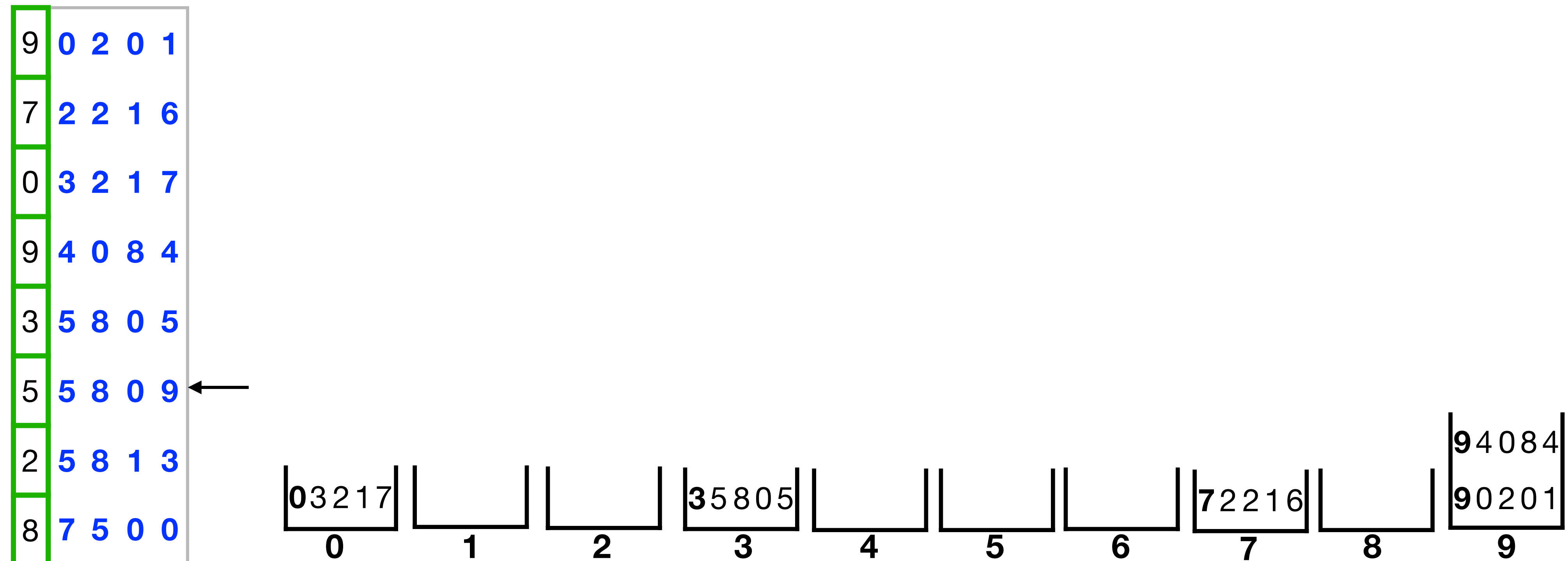
Radix sort using bucket sort



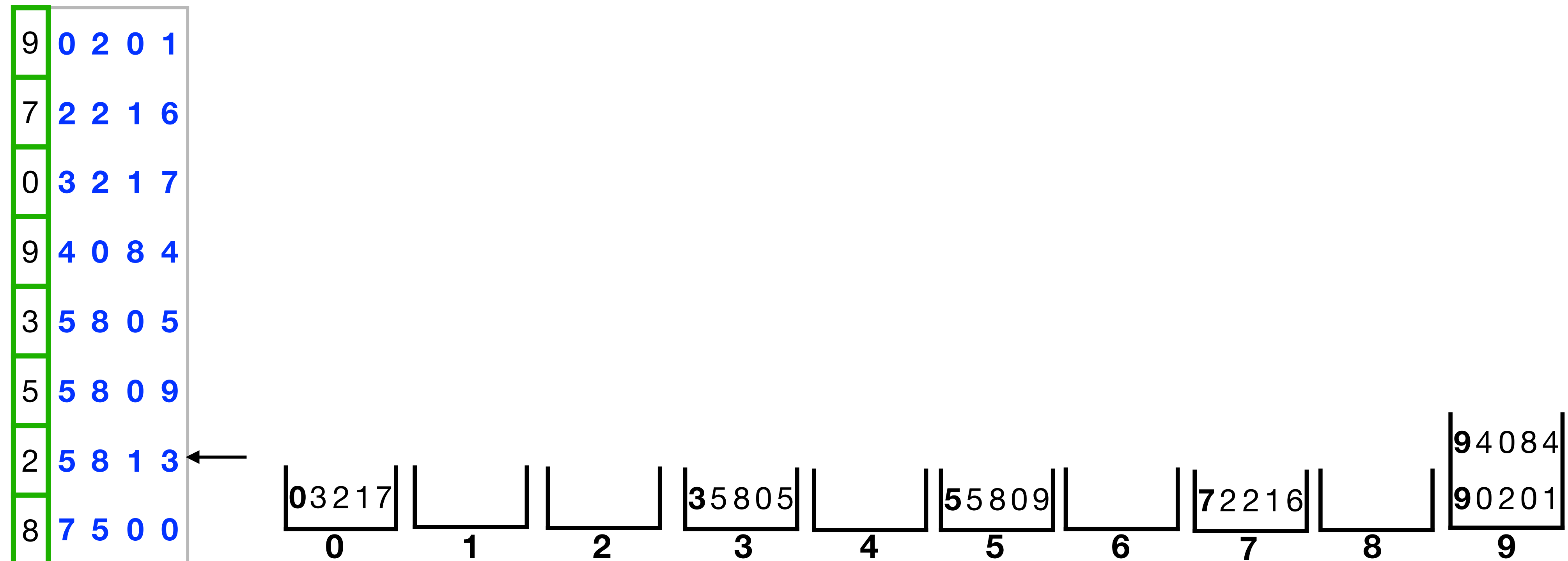
Radix sort using bucket sort



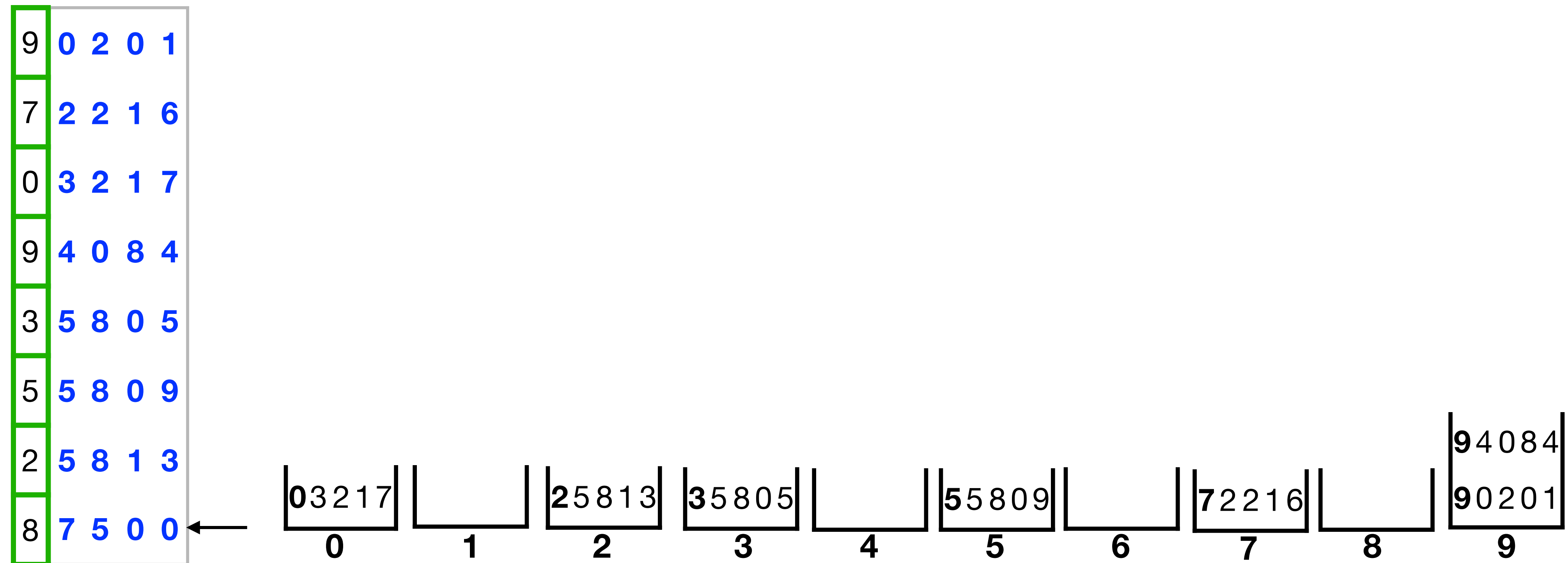
Radix sort using bucket sort



Radix sort using bucket sort



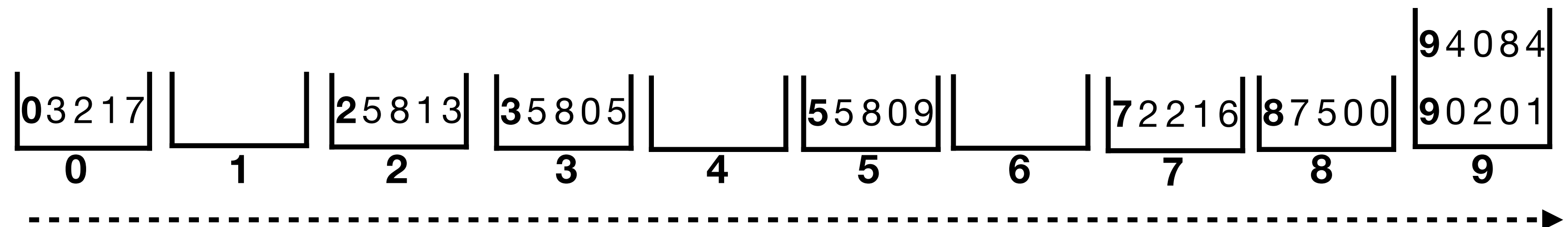
Radix sort using bucket sort



Radix sort using bucket sort

9	0	2	0	1
7	2	2	1	6
0	3	2	1	7
9	4	0	8	4
3	5	8	0	5
5	5	8	0	9
2	5	8	1	3
8	7	5	0	0

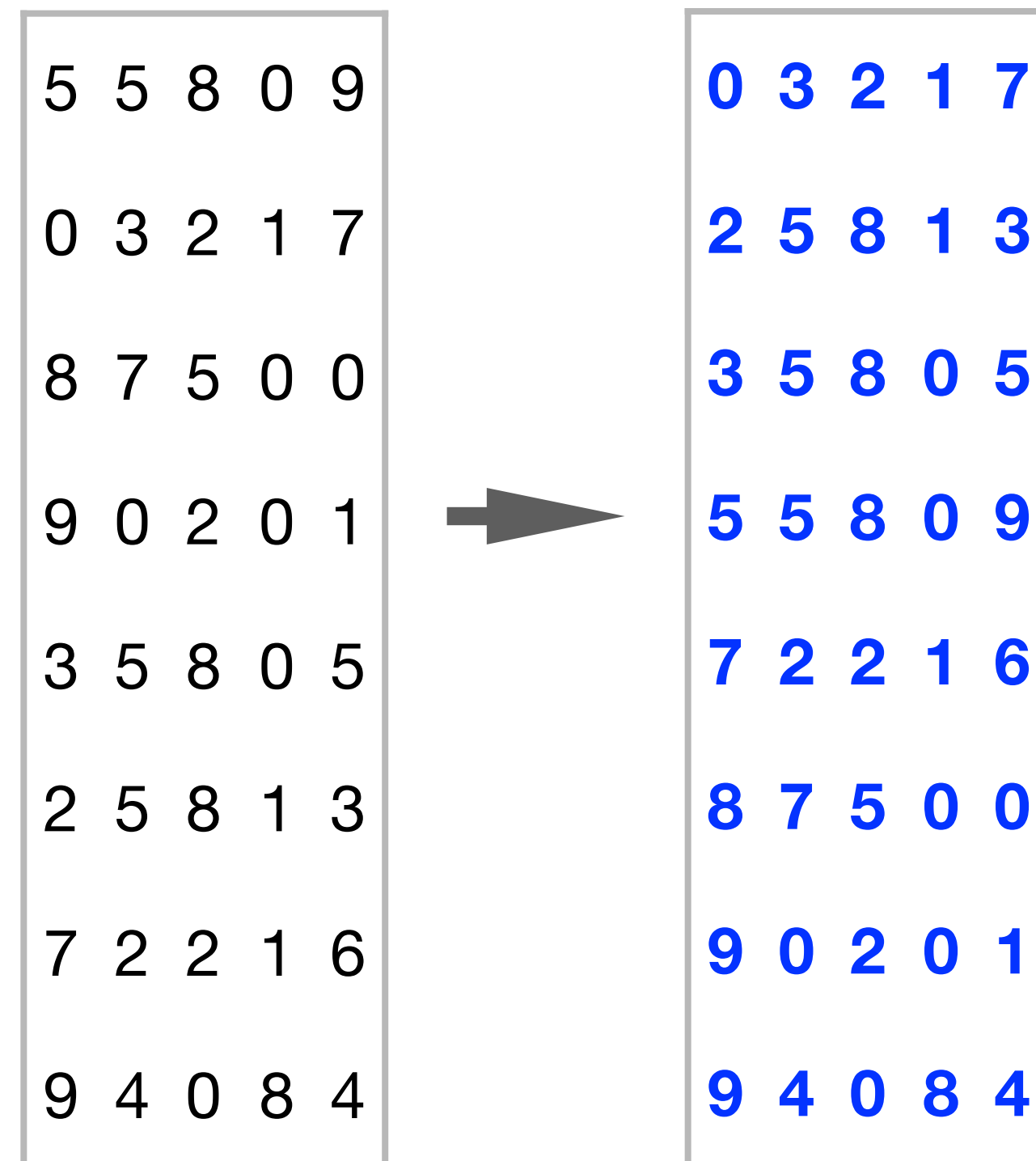
Store back into array in the order bucket 0 to 9



Radix sort using bucket sort solution

0	3	2	1	7
2	5	8	1	3
3	5	8	0	5
5	5	8	0	9
7	2	2	1	6
8	7	5	0	0
9	0	2	0	1
9	4	0	8	4

Radix sort using bucket sort solution



5	5	8	0	9
0	3	2	1	7
8	7	5	0	0
9	0	2	0	1
3	5	8	0	5
2	5	8	1	3
7	2	2	1	6
9	4	0	8	4

0	3	2	1	7
2	5	8	1	3
3	5	8	0	5
5	5	8	0	9
7	2	2	1	6
8	7	5	0	0
9	0	2	0	1
9	4	0	8	4

Radix Sort - Least significant digit

