

① One-hot encoded representation,  $n=10$

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

② sequence of length 5

③ Index representation,  $n=10$

the  
dog  
is  
eating  
a

- 0
- 3
- 1
- 7
- 2

④ Embedding layer

⑤ Embedding vectors,  $m=3$

1.0	0.5	4.3
0.5	2.3	3.1
1.0	0.7	3.2
2.0	4.3	0.1
0.9	1.4	2.5

[red], [green], [blue], [yellow], [light green]

⑥ Embedding vectors are fed one after the other

