

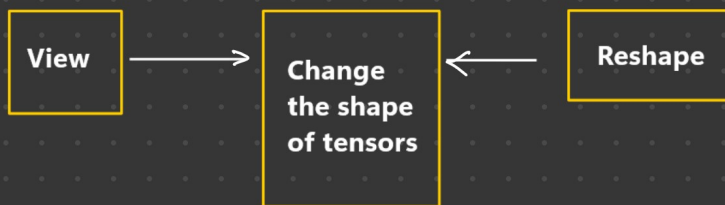


View and Reshape Operation



www.krishnaik.in

view() and reshape() are used to change the shape of tensors. The core idea is to transform a tensor into a new shape while keeping the data consistent.



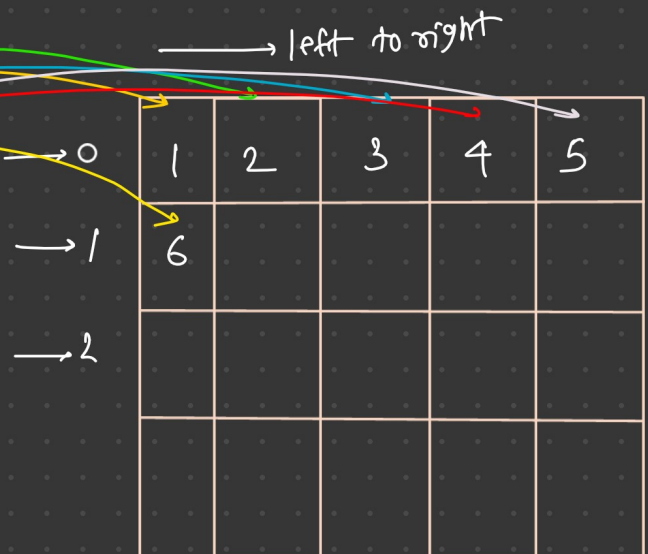
Contiguous

Original-Data : $[[1,2,3], [4,5,6]] \rightarrow 2 \times 3$

In-Memory : $[1,2,3,4,5,6]$



→ better performing.



Non - Contiguous

Original-Data : $[[1,2,3], [4,5,6]]$

Transposed-Data : $[[1,4], [2,5], [3,6]]$

In-Memory : $[1,2,3,4,5,6]$

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| 6 | | | | |
| | | | | |
| | | | | |

The data remains the same in memory but the access pattern changes

→ low perf as compared to contiguous data,

