

6.5 NOTE ABOUT Samplers

03 September 2025

02:55 AM

Avinash Yadav

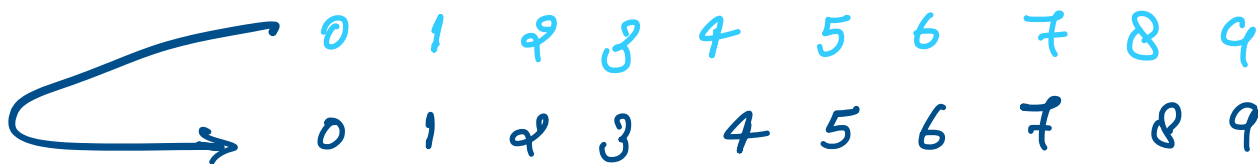
In PyTorch, the sampler in the DataLoader *determines the strategy for selecting samples from the dataset during data loading*. It controls how indices of the dataset are drawn for each batch.

Types of Samplers

PyTorch provides several predefined samplers, and you can create custom ones:

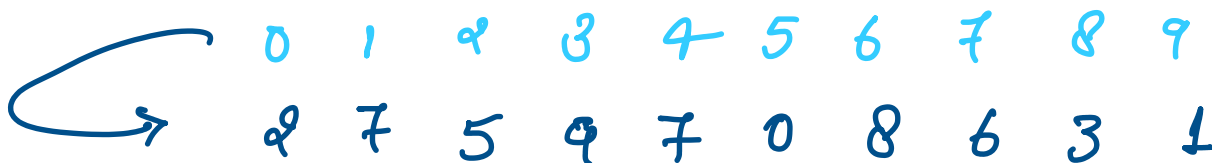
1. SequentialSampler:

- ✧ Samples elements **sequentially**, in the order they appear in the dataset.
- ✧ Sometimes useful in time-series tasks.
- ✧ Default when *shuffle=False*.



2. RandomSampler:

- ✧ Samples elements **randomly** without replacement.
- ✧ Default when *shuffle=True*.



3. Custom Sampler With Custom Logic

for example we have a sample dataset with

Class label-1 → 99% of data
Class label-0 → 1% of data

so while making the batches, we also want to make sure the same representation 99:1 to reflect in the batches we can utilize the concept of making our own sampler.