Variationa Encoders

1️⃣ Theory Questions

Assignment 3: Variational Autoencoders — Theory Questions

Q1: Why is the KL Divergence term important in the VAE loss function?

The Kullback–Leibler (KL) divergence term:

$$D_{\mathrm{KL}}(q_\phi(z|x) \parallel p(z)) = \int q_\phi(z|x) \log \frac{q_\phi(z|x)}{p(z)} \, dz$$

serves as a regularization mechanism in the VAE loss function. It encourages the approximate posterior $$

$$q_\phi(z|x)$$

, produced by the encoder, to stay close to the prior distribution

$$p(z)$$

typically a standard normal. This ensures that:

- The latent space remains continuous and well-structured, enabling smooth interpolation and sampling.
- The model avoids overfitting by discouraging overly complex or disjoint latent representations.
- Generative sampling from the prior results in valid outputs, as the decoder is trained on latent codes drawn from a distribution close to the prior.

Without this term, the encoder might collapse into encoding inputs at arbitrary locations in the latent space, leading to disorganized and discontinuous manifolds.

References:

- Kingma & Welling, *Auto-Encoding Variational Bayes*, arXiv:1312.6114 [Paper]
- Ye et al., *Distribution Matching VAE*, arXiv:2512.07778
- Lee et al., *Latent Diffusion Models with Masked Autoencoders*, ICCV 2025
- Stanford CS231n Lecture Notes on Generative Models

Q2: How does the reparameterization trick enable backpropagation through the stochastic layers of a VAE?

The reparameterization trick rewrites the stochastic sampling of the latent variable

$$z = \mu_\phi(x) + \sigma_\phi(x) \cdot \epsilon, \quad \epsilon \sim \square(0, I)$$

This reformulation isolates the stochasticity in (\epsilon), which is independent of the model parameters. The result is a differentiable computation graph with respect to (\phi), enabling gradient-based optimization via backpropagation. This approach offers low-variance gradient estimates and allows VAEs to be trained using standard gradient descent techniques.

References:

- Kingma & Welling, *Auto-Encoding Variational Bayes*, arXiv:1312.6114
- Doersch, *Tutorial on Variational Autoencoders*, arXiv:1606.05908
- Stanford CS231n Lecture Notes on Generative Models

Q3: Why does a VAE use a probabilistic latent space instead of a fixed latent space?

A VAE maps inputs to distributions over latent variables rather than fixed encodings. This design choice provides several advantages:

- **Uncertainty Modeling:** The encoder reflects uncertainty in its representation, which is useful for ambiguous or noisy inputs.
- **Smooth Latent Space:** Probabilistic mappings prevent the latent space from forming disconnected clusters, facilitating interpolation and sampling.
- **Generative Capability:** Sampling from the prior or learned distributions leads to plausible outputs, which wouldn't be feasible with deterministic encodings.

- **Variational Inference:** The ELBO objective requires modeling $q_\phi(z|x)$ as a distribution to approximate the intractable true posterior.

In contrast, deterministic latent codes do not support sampling-based generation and often lead to poor generalization.

References:

- Doersch, *Tutorial on Variational Autoencoders*, arXiv:1606.05908
- Ye et al., *Distribution Matching VAE*, arXiv:2512.07778
- Lee et al., *Latent Diffusion Models with Masked Autoencoders*, ICCV 2025

Q4: What role does KL Divergence play in ensuring a smooth latent space?

The KL divergence term encourages each latent distribution $q_\phi(z|x)$ to remain close to the global prior $p(z)$. This results in:

- **Overlap Among Latent Distributions:** Ensures that latent codes from different inputs share regions in the latent space.
- **Continuity:** Enables smooth transitions and interpolation between encodings.
- **Robust Generation:** Any point sampled from the latent space is likely to correspond to a meaningful output.
- **Decoder Robustness:** Forces the decoder to generalize across neighborhoods in latent space, not just point estimates.

By shaping the latent space into a single, coherent manifold, the KL term guarantees that the space supports generation, interpolation, and representation learning.

References:

- Kingma & Welling, *Auto-Encoding Variational Bayes*, arXiv:1312.6114
- Shrivastava et al., *Latent Space Characterization of Autoencoder Variants*, arXiv:2412.04755
- Lee et al., *Latent Diffusion Models with Masked Autoencoders*, ICCV 2025

2️⃣ Coding Task

Task1

> Modify the VAE architecture to use convolutional layers for both the encoder and decoder, and train it on the CIFAR-10 dataset. This modification will allow the model to capture spatial relationships within images more effectively, improving its ability to generate high-quality images. After training, compare the generated images with those from a fully connected VAE.

References / Citations

- Lightning-Universe. (n.d.). lightning-bolts [GitHub repository]. GitHub. Retrieved January 31, 2026, from https://github.com/Lightning-Universe/lightning-bolts
- Lightning-Universe. (n.d.). basic_vae_module.py (lightning-bolts) [Source code]. GitHub. Retrieved January 31, 2026, from https://github.com/Lightning-Universe/lightning-bolts/blob/master/src/pl_bolts/models/autoencoders/basic_vae/basic_vae_module.py
- pi-tau. (n.d.). vae [GitHub repository]. GitHub. Retrieved January 31, 2026, from https://github.com/pi-tau/vae
- SashaMalysheva. (n.d.). Pytorch-VAE [GitHub repository]. GitHub. Retrieved January 31, 2026, from https://github.com/SashaMalysheva/Pytorch-VAE


```
#### Cell 1.1 Imports + Reproducibility
import os, math, random
import numpy as np
import matplotlib.pyplot as plt

import torch
import torch.nn as nn
import torch.nn.functional as F
from torch.utils.data import DataLoader

import torchvision
import torchvision.transforms as T
from torchvision.utils import make_grid

from tqdm.auto import tqdm


def seed_everything(seed=42):
```

```
    random.seed(seed)
    np.random.seed(seed)
    torch.manual_seed(seed)
    torch.cuda.manual_seed_all(seed)
    torch.backends.cudnn.deterministic = False
    torch.backends.cudnn.benchmark = True

seed_everything(42)

device = torch.device("cuda" if torch.cuda.is_available() else "cpu")
print("Device:", device)

```

```
Device: cpu
```

```
### Cell 1.2 — CIFAR-10 DataLoaders
BATCH_SIZE = 128
NUM_WORKERS = 2  # can be increase

transform = T.Compose([
    T.ToTensor(),  # outputs in [0,1]
])

train_ds = torchvision.datasets.CIFAR10(root="./data", train=True, download=True, transform=transform)
test_ds  = torchvision.datasets.CIFAR10(root="./data", train=False, download=True, transform=transform)

train_loader = DataLoader(train_ds, batch_size=BATCH_SIZE, shuffle=True,
                          num_workers=NUM_WORKERS, pin_memory=(device.type=="cuda"))
test_loader  = DataLoader(test_ds, batch_size=BATCH_SIZE, shuffle=False,
                          num_workers=NUM_WORKERS, pin_memory=(device.type=="cuda"))

print("Train batches:", len(train_loader), "| Test batches:", len(test_loader))

```

```
100%|██████████| 170M/170M [00:02<00:00, 78.7MB/s]
Train batches: 391 | Test batches: 79
```

```python
### Cell 1.3 — Helper Functions (Loss, Sampling, Plotting)
def kl_divergence(mu, logvar):
    # KL(q(z|x) || p(z)) where p(z)=N(0,1)
    # returns sum over batch and latent dims
    return -0.5 * torch.sum(1 + logvar - mu.pow(2) - logvar.exp())

def recon_loss_fn(recon_x, x, kind="mse"):
    # returns sum over all pixels + batch
    if kind == "bce":
        return F.binary_cross_entropy(recon_x, x, reduction="sum")
    return F.mse_loss(recon_x, x, reduction="sum")

def vae_loss(recon_x, x, mu, logvar, beta=1.0, recon_kind="mse"):
    recon = recon_loss_fn(recon_x, x, kind=recon_kind)
    kl = kl_divergence(mu, logvar)
    total = recon + beta * kl
    # Return per-batch average (more readable)
    bs = x.size(0)
    return total / bs, recon / bs, kl / bs

@torch.no_grad()
def sample_images(model, latent_dim, n=8):
    model.eval()
    z = torch.randn(n, latent_dim, device=device)
    x = model.decode(z).clamp(0, 1)
    return x

@torch.no_grad()
def reconstruct_images(model, x):
    model.eval()
    recon, mu, logvar = model(x)
    return recon.clamp(0, 1)

def show_grid(images, title="", nrow=8, figsize=(10, 4)):
    # images: (B,3,32,32)
    grid = make_grid(images.cpu(), nrow=nrow, padding=2)
    plt.figure(figsize=figsize)
    plt.imshow(grid.permute(1,2,0))
    plt.axis("off")
```

```
    plt.title(title)
    plt.show()

```

```
### Cell 1.4 Cell 4 — Baseline: Fully-Connected VAE (MLP)
class FCVAE(nn.Module):
    def __init__(self, latent_dim=128, hidden_dims=(1024, 512)):
        super().__init__()
        self.latent_dim = latent_dim
        in_dim = 3 * 32 * 32

        h1, h2 = hidden_dims
        self.enc = nn.Sequential(
            nn.Linear(in_dim, h1),
            nn.ReLU(inplace=True),
            nn.Linear(h1, h2),
            nn.ReLU(inplace=True),
        )
        self.fc_mu = nn.Linear(h2, latent_dim)
        self.fc_logvar = nn.Linear(h2, latent_dim)

        self.dec_fc = nn.Sequential(
            nn.Linear(latent_dim, h2),
            nn.ReLU(inplace=True),
            nn.Linear(h2, h1),
            nn.ReLU(inplace=True),
            nn.Linear(h1, in_dim),
        )

    def encode(self, x):
        x = x.view(x.size(0), -1)
        h = self.enc(x)
        return self.fc_mu(h), self.fc_logvar(h)

    def reparameterize(self, mu, logvar):
        std = torch.exp(0.5 * logvar)
        eps = torch.randn_like(std)
        return mu + eps * std
```

```python

    def decode(self, z):
        out = self.dec_fc(z)
        out = torch.sigmoid(out)  # output in [0,1]
        return out.view(z.size(0), 3, 32, 32)

    def forward(self, x):
        mu, logvar = self.encode(x)
        z = self.reparameterize(mu, logvar)
        recon = self.decode(z)
        return recon, mu, logvar

```

```python
### Cell 1.5 — Task Model: Convolutional VAE (Conv Encoder + Conv Decoder)
class ConvVAE(nn.Module):
    def __init__(self, latent_dim=128):
        super().__init__()
        self.latent_dim = latent_dim

        # 32x32 -> 16x16 -> 8x8 -> 4x4 -> 2x2
        self.encoder = nn.Sequential(
            nn.Conv2d(3, 32, 4, 2, 1),   # (B,32,16,16)
            nn.BatchNorm2d(32),
            nn.ReLU(inplace=True),

            nn.Conv2d(32, 64, 4, 2, 1),  # (B,64,8,8)
            nn.BatchNorm2d(64),
            nn.ReLU(inplace=True),

            nn.Conv2d(64, 128, 4, 2, 1), # (B,128,4,4)
            nn.BatchNorm2d(128),
            nn.ReLU(inplace=True),

            nn.Conv2d(128, 256, 4, 2, 1),# (B,256,2,2)
            nn.BatchNorm2d(256),
            nn.ReLU(inplace=True),
        )

```

```
        self.enc_out_dim = 256 * 2 * 2
        self.fc_mu = nn.Linear(self.enc_out_dim, latent_dim)
        self.fc_logvar = nn.Linear(self.enc_out_dim, latent_dim)

        self.fc_dec = nn.Linear(latent_dim, self.enc_out_dim)

        # 2x2 -> 4x4 -> 8x8 -> 16x16 -> 32x32
        self.decoder = nn.Sequential(
            nn.ConvTranspose2d(256, 128, 4, 2, 1),  # (B,128,4,4)
            nn.BatchNorm2d(128),
            nn.ReLU(inplace=True),

            nn.ConvTranspose2d(128, 64, 4, 2, 1),   # (B,64,8,8)
            nn.BatchNorm2d(64),
            nn.ReLU(inplace=True),

            nn.ConvTranspose2d(64, 32, 4, 2, 1),    # (B,32,16,16)
            nn.BatchNorm2d(32),
            nn.ReLU(inplace=True),

            nn.ConvTranspose2d(32, 3, 4, 2, 1),     # (B,3,32,32)
            nn.Sigmoid(),  # output in [0,1]
        )

    def encode(self, x):
        h = self.encoder(x)
        h = h.view(h.size(0), -1)
        return self.fc_mu(h), self.fc_logvar(h)

    def reparameterize(self, mu, logvar):
        std = torch.exp(0.5 * logvar)
        eps = torch.randn_like(std)
        return mu + eps * std

    def decode(self, z):
        h = self.fc_dec(z).view(z.size(0), 256, 2, 2)
        return self.decoder(h)

    def forward(self, x):
```

```
        mu, logvar = self.encode(x)
        z = self.reparameterize(mu, logvar)
        recon = self.decode(z)
        return recon, mu, logvar

```

```
### Cel 1.6 — Training / Evaluation Loop
def train_vae(model, train_loader, test_loader, epochs=10, lr=2e-4, beta=1.0, recon_kind="mse"):
    model = model.to(device)
    opt = torch.optim.Adam(model.parameters(), lr=lr)

    use_amp = (device.type == "cuda")
    scaler = torch.cuda.amp.GradScaler(enabled=use_amp)

    history = {"train_total": [], "train_recon": [], "train_kl": [],
               "test_total": [], "test_recon": [], "test_kl": []}

    for epoch in range(1, epochs + 1):
        # ---- train ----
        model.train()
        t_total = t_recon = t_kl = 0.0
        n_train = 0

        pbar = tqdm(train_loader, desc=f"Epoch {epoch}/{epochs} [train]", leave=False)
        for x, _ in pbar:
            x = x.to(device, non_blocking=True)

            opt.zero_grad(set_to_none=True)
            with torch.cuda.amp.autocast(enabled=use_amp):
                recon, mu, logvar = model(x)
                loss, rloss, kl = vae_loss(recon, x, mu, logvar, beta=beta, recon_kind=recon_kind)

            scaler.scale(loss).backward()
            scaler.step(opt)
            scaler.update()

            bs = x.size(0)
            t_total += loss.item() * bs
```

```
            t_recon += rloss.item() * bs
            t_kl += kl.item() * bs
            n_train += bs

            pbar.set_postfix({"loss": loss.item(), "recon": rloss.item(), "kl": kl.item()})

        train_total = t_total / n_train
        train_recon = t_recon / n_train
        train_kl = t_kl / n_train

        # ---- eval ----
        model.eval()
        v_total = v_recon = v_kl = 0.0
        n_test = 0
        with torch.no_grad():
            for x, _ in tqdm(test_loader, desc=f"Epoch {epoch}/{epochs} [eval]", leave=False):
                x = x.to(device, non_blocking=True)
                recon, mu, logvar = model(x)
                loss, rloss, kl = vae_loss(recon, x, mu, logvar, beta=beta, recon_kind=recon_kind)

                bs = x.size(0)
                v_total += loss.item() * bs
                v_recon += rloss.item() * bs
                v_kl += kl.item() * bs
                n_test += bs

        test_total = v_total / n_test
        test_recon = v_recon / n_test
        test_kl = v_kl / n_test

        history["train_total"].append(train_total)
        history["train_recon"].append(train_recon)
        history["train_kl"].append(train_kl)
        history["test_total"].append(test_total)
        history["test_recon"].append(test_recon)
        history["test_kl"].append(test_kl)

        print(f"Epoch {epoch:02d}/{epochs} | "
              f"Train: total={train_total:.4f}, recon={train_recon:.4f}, kl={train_kl:.4f} | "
```

```
              f"Test: total={test_total:.4f}, recon={test_recon:.4f}, kl={test_kl:.4f}")

    return history

```

```
#### Cell 1.7 — Train FC-VAE and Conv-VAE
LATENT_DIM = 128
EPOCHS = 50          # try 5 for a quick run, 20-50 for better samples
LR = 2e-4
BETA = 1.5           # classic VAE; trying 1 - 0.5 or 2.0 v=cane be tweaked to see effect
RECON = "mse"        # "mse" or "bce" (MSE tends to behave better for natural images)

fc_vae = FCVAE(latent_dim=LATENT_DIM)
conv_vae = ConvVAE(latent_dim=LATENT_DIM)

print("Training Fully-Connected VAE...")
hist_fc = train_vae(fc_vae, train_loader, test_loader,
                    epochs=EPOCHS, lr=LR, beta=BETA, recon_kind=RECON)

print("\nTraining Convolutional VAE...")
hist_conv = train_vae(conv_vae, train_loader, test_loader,
                      epochs=EPOCHS, lr=LR, beta=BETA, recon_kind=RECON)

```

```
Training Fully-Connected VAE...
/tmp/ipython-input-1189186631.py:7: FutureWarning: `torch.cuda.amp.GradScaler(args...)` is deprecated. Please use `torch.amp.GradScaler(
  scaler = torch.cuda.amp.GradScaler(enabled=use_amp)


/tmp/ipython-input-1189186631.py:23: FutureWarning: `torch.cuda.amp.autocast(args...)` is deprecated. Please use `torch.amp.autocast('cu
  with torch.cuda.amp.autocast(enabled=use_amp):


Epoch 01/50 | Train: total=154.0918, recon=145.6712, kl=5.6137 | Test: total=135.5942, recon=122.3681, kl=8.8174




Epoch 02/50 | Train: total=130.7314, recon=118.4788, kl=8.1684 | Test: total=123.2742, recon=111.1305, kl=8.0958




Epoch 03/50 | Train: total=118.6342, recon=106.8392, kl=7.8633 | Test: total=114.9866, recon=103.5607, kl=7.6173


Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Exception ignored in: <function _MultiProcessir

Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
        self._shutdown_workers()self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        if w.is_alive():if w.is_alive():

             ^^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
assert self._parent_pid == os.getpid(), 'can only test a child process'
assert self._parent_pid == os.getpid(), 'can only test a child process'
                    ^ ^^^^^^^^^^^^^^^^^^^
```

```
Exception ignored in: Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0><function _MultiProcessir

Traceback (most recent call last):
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
    self._shutdown_workers()  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_wor

      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
if w.is_alive():
              ^^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

    assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/lib/python3.12/multiprocessing/process.py", line

    assert self._parent_pid == os.getpid(), 'can only test a child process'
                ^  ^^ ^ ^^^^^^^^^^^^^^^^^^^
```

```
^^^
AssertionError: can only test a child processException ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
        self._shutdown_workers()self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        if w.is_alive():
if w.is_alive():
             ^^^^^^^^^^^^^^^^^^^^^^^^

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'assert self._parent_pid == os.getpid(), 'can only test a

                     ^^^^^^^^^^^^^^^^^^^
```

```
AssertionError^: ^can only test a child process^
^^Exception ignored in: ^^^
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>AssertionError
Traceback (most recent call last):
: can only test a child process  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
Exception ignored in:     <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>if w.is_alive():

Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers()
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():^
^^ ^  ^ ^ ^ ^ ^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^  ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
      ^ ^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^^
^^^^^
AssertionError: can only test a child process


Epoch 04/50 | Train: total=112.0172, recon=99.7779, kl=8.1595 | Test: total=108.5564, recon=96.2131, kl=8.2288




Epoch 05/50 | Train: total=105.4737, recon=92.1058, kl=8.9119 | Test: total=103.2555, recon=89.3506, kl=9.2699




Epoch 06/50 | Train: total=102.6124, recon=88.5667, kl=9.3638 | Test: total=101.6899, recon=87.8856, kl=9.2028




Epoch 07/50 | Train: total=101.4763, recon=87.4654, kl=9.3406 | Test: total=101.4577, recon=87.8081, kl=9.0997
```

```
Epoch 08/50 | Train: total=100.0688, recon=85.6052, kl=9.6424 | Test: total=99.2660, recon=84.3624, kl=9.9357



Epoch 09/50 | Train: total=98.7652, recon=83.8260, kl=9.9595 | Test: total=97.9713, recon=83.1115, kl=9.9065


Exception ignored in: Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
        self._shutdown_workers()self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        if w.is_alive():if w.is_alive():

            ^ ^^^^^^^^^^^^^^^^^^^^^^^

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'assert self._parent_pid == os.getpid(), 'can only test a

                 ^ ^  ^ ^^^^^^^^^^^^^^^^^^^
```

```
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
       if w.is_alive():
          ^^^^^^^^^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^

   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
       assert self._parent_pid == os.getpid(), 'can only test a child process'
              ^ ^ ^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process

AssertionError: can only test a child processException ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Traceback (most recent call last):

Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
self._shutdown_workers()    self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        if w.is_alive():if w.is_alive():

           ^^ ^^ ^^^^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^

   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
          ^  ^ ^ ^^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError: can only test a child process

Exception ignored in: AssertionError<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>:
Traceback (most recent call last):
can only test a child process  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
Exception ignored in:     <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
if w.is_alive():Traceback (most recent call last):

   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
```

```
      self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
     if w.is_alive():
  ^^  ^ ^  ^ ^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^^
assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/lib/python3.12/multiprocessing/process.py", line 160

     assert self._parent_pid == os.getpid(), 'can only test a child process'
               ^ ^  ^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError: ^can only test a child process^
^^
AssertionErrorException ignored in: : <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>can only test a child process

Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
self._shutdown_workers()Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
if w.is_alive():
      self._shutdown_workers()
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():
^ ^ ^^  ^  ^^ ^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^ ^     ^ ^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
    ^  ^ ^^ ^ ^ ^  ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^AssertionError^: ^can only test a child process^^
^^Exception ignored in:
AssertionError<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>:
can only test a child process
Exception ignored in: Traceback (most recent call last):
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/data

Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
self._shutdown_workers()
    if w.is_alive():  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

       if w.is_alive():
       ^ ^ ^ ^^^^^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^

   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'
        ^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^
```

```
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     assert self._parent_pid == os.getpid(), 'can only test a child process'
 ^ ^^ ^   ^ ^   ^  ^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^   ^  ^ ^  ^ ^  ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    ^if w.is_alive():^
  ^ ^ ^
 AssertionError : ^can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^^self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
if w.is_alive():
assert self._parent_pid == os.getpid(), 'can only test a child process'
              ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
^  ^ ^^  ^ ^^  ^ ^ ^^ ^^^^^^^^
^AssertionError^: ^^can only test a child process
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^if w.is_alive():^
 ^  ^ ^ ^ ^ ^^^^^^^^^^^
```

```
^AssertionError: can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    self._shutdown_workers()assert self._parent_pid == os.getpid(), 'can only test a child process'
if w.is_alive():
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

            ^ ^ ^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^  ^ ^  ^^ ^  ^^  ^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^self._shutdown_workers()

AssertionError  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    : if w.is_alive():can only test a child process

  Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers() ^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^^  ^  ^ ^^  ^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
  ^  ^ ^  ^ ^ ^  ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^AssertionError^: ^^can only test a child process
^^^
AssertionError: can only test a child process


Epoch 10/50 | Train: total=97.5897, recon=82.4720, kl=10.0785 | Test: total=96.9317, recon=81.5670, kl=10.2431
```

```
Epoch 11/50 | Train: total=96.1791, recon=80.9654, kl=10.1425 | Test: total=95.3884, recon=80.2953, kl=10.0621



Epoch 12/50 | Train: total=94.5442, recon=78.7315, kl=10.5418 | Test: total=94.8838, recon=79.1841, kl=10.4665



Epoch 13/50 | Train: total=93.7550, recon=77.6244, kl=10.7538 | Test: total=93.6598, recon=77.1886, kl=10.9808



Epoch 14/50 | Train: total=92.9184, recon=76.6583, kl=10.8401 | Test: total=92.7005, recon=76.1420, kl=11.0390



Epoch 15/50 | Train: total=92.2598, recon=75.9064, kl=10.9023 | Test: total=92.1085, recon=75.6106, kl=10.9986


Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Exception ignored in:
 Traceback (most recent call last):
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/data

 Traceback (most recent call last):
       File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
self._shutdown_workers()^
    ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^if w.is_alive():^    ^if w.is_alive():

^  ^  ^  ^  ^  ^
```

```
  ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^^ ^^ ^^^ ^ ^^^ ^ ^^
 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^     ^ assert self._parent_pid == os.getpid(), 'can only test a child process'
^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^     ^ ^assert self._parent_pid == os.getpid(), 'can only test a child process' ^
^ ^  ^   ^  ^  ^  ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^^AssertionError^^: ^^^can only test a child process^
^^^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^^^self._shutdown_workers()^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^^    ^
if w.is_alive():^AssertionError

:  can only test a child processAssertionError
: Exception ignored in: can only test a child process<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

 Traceback (most recent call last):
Exception ignored in:   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
 <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
self._shutdown_workers()
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^if w.is_alive():^^
    ^ self._shutdown_workers()^
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^      ^if w.is_alive():^
^  ^ ^ ^ ^
^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^     ^assert self._parent_pid == os.getpid(), 'can only test a child process' ^^
^ ^^ ^^ ^^ ^ ^^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^     ^  assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^ ^ ^ ^^^^^ ^^^
^ ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^ ^    ^ ^ assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^^ ^^^^ ^^ ^ ^^ ^^ ^^ ^^ ^^^ ^^ ^^^^^^^^^^^
AssertionError^^: ^^^can only test a child process^^
```

```
AssertionError^^: ^^^can only test a child process^^^
^^^^Exception ignored in: ^^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^^^^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^^^^    ^^^if w.is_alive():^

^AssertionError ^ :  can only test a child process^
  ^ Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0> ^
^^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^^self._shutdown_workers()^^
^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^AssertionError^    : ^if w.is_alive():can only test a child process^

^   ^ Exception ignored in: ^
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, i

 Traceback (most recent call last):
    ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
assert self._parent_pid == os.getpid(), 'can only test a child process'^^
    ^ self._shutdown_workers()^ ^
 ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
     ^ if w.is_alive():^
^  ^  ^
    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
       assert self._parent_pid == os.getpid(), 'can only test a child process'
  ^  ^^  ^^ ^^ ^^^^ ^^^ ^^ ^^^ ^ ^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^^ ^^ ^ ^^^ ^ ^ ^^ ^^ ^^ ^^ ^^^ ^^^^^^^
^^AssertionError^^: ^^^can only test a child process^^^
^^Exception ignored in: ^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

^    AssertionError^self._shutdown_workers(): ^can only test a child process

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    Exception ignored in: ^if w.is_alive():<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
```

```
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^     ^ ^self._shutdown_workers()^ ^
 ^ ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
 ^ ^^^^^^ ^
^ AssertionError^can only test a child process:  ^
^ ^Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^
      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^self._shutdown_workers()    assert self._parent_pid == os.getpid(), 'can only test a child process'
^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
 ^     if w.is_alive(): ^
   ^ ^   ^    ^
    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^^    ^^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^^^^ ^^^ ^^^^ ^ ^^^
^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      ^assert self._parent_pid == os.getpid(), 'can only test a child process' ^
 ^^ ^  ^ ^^  ^^^ ^  ^^ ^^ ^ ^ ^^^^^^^^^^^^^
^^AssertionError^^: ^can only test a child process^^
^^^^^^^^Exception ignored in: ^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^^^^^^
^^^Traceback (most recent call last):
^^^^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^    ^self._shutdown_workers()^^^^^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^
if w.is_alive():
AssertionErrorAssertionError
:  : can only test a child process can only test a child process

   Exception ignored in: Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0> <function _MultiProce

Traceback (most recent call last):
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^    ^self._shutdown_workers()self._shutdown_workers()^

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^        ^if w.is_alive():if w.is_alive():^
^ ^


    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'
    ^^^^^^^^^ ^^ ^^ ^ ^^ ^^ ^^ ^^ ^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     assert self._parent_pid == os.getpid(), 'can only test a child process'^
^assert self._parent_pid == os.getpid(), 'can only test a child process' ^^
 ^  ^   ^  ^ ^    ^  ^   ^  ^ ^^^^^^^^^
```

```
          File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^ ^ ^     ^ assert self._parent_pid == os.getpid(), 'can only test a child process'^ ^
^^ ^^^ ^^ ^^ ^^ ^^^ ^^ ^ ^^^ ^^ ^^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process
^^
AssertionError: Exception ignored in: can only test a child process^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^

^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^Exception ignored in: self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>    ^^
if w.is_alive():Traceback (most recent call last):

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
 ^     self._shutdown_workers()^
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^      ^if w.is_alive():
^ ^
 ^ AssertionError^:  ^can only test a child process ^^
  ^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^
    ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
self._shutdown_workers()^
^assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data

^    ^ if w.is_alive(): ^
^ ^
     File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
          assert self._parent_pid == os.getpid(), 'can only test a child process'
 ^^ ^^ ^^ ^ ^^^ ^^^ ^^ ^^ ^^ ^^ ^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^^ ^^ ^^ ^^^^ ^ ^ ^^ ^^ ^ ^^ ^^^ ^^^^^^^^^^
^^^^AssertionError^^: ^^^can only test a child process
^^^^Exception ignored in: ^^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^^    ^
^self._shutdown_workers()AssertionError^
```

```
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
: ^can only test a child process^
    ^if w.is_alive():^Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0> ^
 Traceback (most recent call last):
^ ^ ^^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
 ^     ^^self._shutdown_workers()^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^^
^    AssertionError^if w.is_alive():^: ^can only test a child process
^^
^^
Exception ignored in:   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>assert self._parent_pid == os.getpid(), 'can only test a child

Traceback (most recent call last):
    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
       self._shutdown_workers()^
^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^ ^     ^if w.is_alive(): ^
 ^ ^    ^ ^^ ^ ^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^^
^ ^^^ ^^ ^^ ^^ ^ ^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^     assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^  ^ ^  ^^ ^^ ^^^^ ^^^ ^^ ^
^ AssertionError^^: ^can only test a child process^^
^^^^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^^Traceback (most recent call last):
^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^    ^self._shutdown_workers()^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^if w.is_alive():^^^^
^^ ^^^ ^^ ^^^ ^^^
 ^AssertionError : ^can only test a child process
^^^^^Exception ignored in: ^^^^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^

^Traceback (most recent call last):
AssertionError^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    : ^self._shutdown_workers()

can only test a child process  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
```

```
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

assert self._parent_pid == os.getpid(), 'can only test a child process'
if w.is_alive(): Exception ignored in:
  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
  Traceback (most recent call last):
     File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
        self._shutdown_workers()
    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^     ^ if w.is_alive():^
^ ^ ^^  ^^^ ^ ^ ^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^^^^ ^ ^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^     ^^ assert self._parent_pid == os.getpid(), 'can only test a child process'^
^  ^ ^   ^  ^  ^ ^^ ^ ^ ^^ ^^^^^^^^^^^
^^AssertionError^^: ^^^^can only test a child process
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^^^^^^^
^^^^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Traceback (most recent call last):
^^^    ^self._shutdown_workers()^^^^^^^^^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^^    if w.is_alive():^^
^ ^ ^ ^ ^
^ AssertionError^^:
can only test a child processAssertionError^:
^^Exception ignored in: can only test a child process^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^^Exception ignored in: ^
^Traceback (most recent call last):
^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

Traceback (most recent call last):
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
            self._shutdown_workers()assert self._parent_pid == os.getpid(), 'can only test a child process'self._shutdown_workers()


   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
            if w.is_alive():if w.is_alive():
```

```
              ^ ^  ^^ ^^^^^^ ^^^^^^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    ^ assert self._parent_pid == os.getpid(), 'can only test a child process'^
 ^  ^    ^^  ^   ^ ^  ^    ^  ^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^^^^^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^^^^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^    self._shutdown_workers()^^^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^^if w.is_alive():^^^^
^^ ^^^^
 ^AssertionError ^: ^ can only test a child process

 AssertionError^: ^can only test a child process^^
^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process


Epoch 16/50 | Train: total=91.7693, recon=75.2973, kl=10.9813 | Test: total=91.7270, recon=75.1847, kl=11.0282




Epoch 17/50 | Train: total=91.2984, recon=74.7435, kl=11.0366 | Test: total=91.4638, recon=74.1529, kl=11.5406




Epoch 18/50 | Train: total=90.9137, recon=74.1177, kl=11.1973 | Test: total=91.1020, recon=74.0196, kl=11.3883




Epoch 19/50 | Train: total=90.5212, recon=73.3722, kl=11.4327 | Test: total=90.9083, recon=74.0034, kl=11.2699
```

```
Epoch 20/50 | Train: total=90.0120, recon=72.5680, kl=11.6293 | Test: total=90.0597, recon=72.4162, kl=11.7623



Epoch 21/50 | Train: total=89.5205, recon=71.7794, kl=11.8274 | Test: total=89.5472, recon=71.8288, kl=11.8123


Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers() ^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^^
^ ^ ^ ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^
self._shutdown_workers()AssertionError
:   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
can only test a child process
if w.is_alive():
Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers() ^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
^    ^if w.is_alive():^
^ ^ ^ ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^self._shutdown_workers()^

AssertionError  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
:     can only test a child processif w.is_alive():

  Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
  Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^ ^ ^ ^^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^ ^
    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^
if w.is_alive():AssertionError
:  can only test a child process
   Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
```

```
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    if w.is_alive():^^
^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
       assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^AssertionError: ^^can only test a child process^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^self._shutdown_workers()
AssertionError
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
: can only test a child process
if w.is_alive():
Exception ignored in:   <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^^
^ ^ ^ ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^  ^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
AssertionError:     can only test a child processif w.is_alive():

 Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del
```

```
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^if w.is_alive():^
^ ^ ^ ^ ^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^^ ^ ^ ^ ^  ^^  ^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^^: ^can only test a child process^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    self._shutdown_workers()

AssertionError  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
: can only test a child process
if w.is_alive():
 Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
     ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^^ ^ ^  ^^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^  ^ ^ ^^ ^  ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^
    AssertionErrorif w.is_alive()::
can only test a child process
  Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
```

```
 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^ ^ ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^ ^ ^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
AssertionError    : if w.is_alive():can only test a child process

    Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^ ^ ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^ ^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

    AssertionError: if w.is_alive():can only test a child process
```

```
  Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
 ^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^^if w.is_alive():^
^ ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
 ^ ^^ ^ ^ ^ ^ ^ ^ ^ ^ ^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^ ^  ^ ^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

    AssertionErrorif w.is_alive()::
can only test a child process
   Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^ ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^  ^ ^ ^  ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^^AssertionError: ^^can only test a child process
^^^^^
AssertionError: can only test a child process


Epoch 22/50 | Train: total=89.1949, recon=71.2960, kl=11.9326 | Test: total=89.2719, recon=71.1453, kl=12.0844
```

```
Epoch 23/50 | Train: total=88.9412, recon=70.9717, kl=11.9797 | Test: total=89.2611, recon=71.2019, kl=12.0394



Epoch 24/50 | Train: total=88.8147, recon=70.7580, kl=12.0378 | Test: total=89.1736, recon=70.7058, kl=12.3119



Epoch 25/50 | Train: total=88.6801, recon=70.5833, kl=12.0645 | Test: total=88.9893, recon=71.0826, kl=11.9378



Epoch 26/50 | Train: total=88.5228, recon=70.3954, kl=12.0849 | Test: total=88.9007, recon=70.8863, kl=12.0096



Epoch 27/50 | Train: total=88.4112, recon=70.1491, kl=12.1747 | Test: total=88.7786, recon=70.9659, kl=11.8751


Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
        self._shutdown_workers()self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        if w.is_alive():if w.is_alive():

          ^ ^ ^ ^ ^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
                 ^ ^^^^^^^^^^^^^^^
```

```
Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>AssertionError
: can only test a child processTraceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Traceback (most recent call last):
        if w.is_alive():self._shutdown_workers()

    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        if w.is_alive(): ^
^ ^ ^^ ^  ^ ^ ^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
        ^ ^ ^ ^ ^  ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError: can only test a child process^
^^^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
AssertionError
Traceback (most recent call last):
: can only test a child process
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

if w.is_alive():Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():
  ^ ^ ^ ^^ ^ ^ ^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
        ^  ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
```

```
^AssertionError^: ^can only test a child process

AssertionError: Exception ignored in: can only test a child process<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

Exception ignored in: Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()    self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
if w.is_alive():
if w.is_alive():
              ^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^
      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
assert self._parent_pid == os.getpid(), 'can only test a child process'
assert self._parent_pid == os.getpid(), 'can only test a child process'
                     ^ ^^^^^^^^^^^^^^^^^^^
```

```
          ^  ^ ^  ^ ^^^
```

```
assert self._parent_pid == os.getpid(), 'can only test a child process'
                    ^^^
```

```
assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/lib/python3.12/multiprocessing/process.py", line 160

      assert self._parent_pid == os.getpid(), 'can only test a child process'
               ^^ ^ ^^ ^ ^^^
```

```
      assert self._parent_pid == os.getpid(), 'can only test a child process'
^  ^ ^ ^^^ ^ ^^^^^
    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^^ ^ ^  ^ ^^  ^ ^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^AssertionError: ^can only test a child process^^
^^^^^
AssertionError: can only test a child process


Epoch 28/50 | Train: total=88.2876, recon=69.9444, kl=12.2288 | Test: total=88.8994, recon=70.6234, kl=12.1840




Epoch 29/50 | Train: total=88.1530, recon=69.7070, kl=12.2973 | Test: total=88.8233, recon=70.0708, kl=12.5017




Epoch 30/50 | Train: total=88.0673, recon=69.5904, kl=12.3180 | Test: total=88.5036, recon=70.0272, kl=12.3176




Epoch 31/50 | Train: total=87.9725, recon=69.3635, kl=12.4060 | Test: total=88.5025, recon=70.3007, kl=12.1345




Epoch 32/50 | Train: total=87.8643, recon=69.2226, kl=12.4278 | Test: total=88.4278, recon=70.0027, kl=12.2834




Epoch 33/50 | Train: total=87.7375, recon=69.0158, kl=12.4811 | Test: total=88.3236, recon=69.7798, kl=12.3625


Exception ignored in: Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0><function _MultiProcessir

Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    Traceback (most recent call last):
self._shutdown_workers()  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
```

```
    self._shutdown_workers()  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_wor

      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():if w.is_alive():

            ^ ^^^^^^^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^

   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^ ^^ ^ ^^  ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^^: ^^can only test a child process^
^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    if w.is_alive():^

AssertionError :     can only test a child process
  Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^self._shutdown_workers()^^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^^if w.is_alive():^

   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     assert self._parent_pid == os.getpid(), 'can only test a child process'
        ^ ^ ^ ^ ^ ^^ ^ ^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
  ^ ^ ^^ ^ ^ ^  ^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    if w.is_alive():^
  ^
 AssertionError : can only test a child process
```

```
AssertionError : can only test a child process
Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^ ^
    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
^ ^ ^ ^ ^ ^^^  ^ ^ ^^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^^assert self._parent_pid == os.getpid(), 'can only test a child process'
^ ^ ^ ^ ^^ ^ ^ ^ ^^ ^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError^: ^can only test a child process^
^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^^self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    ^if w.is_alive():^^^
^ ^ ^
 AssertionError :  can only test a child process ^^^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^
self._shutdown_workers()  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
assert self._parent_pid == os.getpid(), 'can only test a child process'
     if w.is_alive():
               ^ ^ ^^^^^^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^^ ^ ^ ^^  ^ ^ ^ ^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^^Exception ignored in: ^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^^ ^ ^
```

```
^^^^^^
  AssertionError : can only test a child process^^^^
^^^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
Traceback (most recent call last):
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
assert self._parent_pid == os.getpid(), 'can only test a child process'
     self._shutdown_workers()
    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():
        ^ ^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^   ^  ^ ^
 ^AssertionError^: ^can only test a child process
^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^^self._shutdown_workers()^^^^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^^    ^^^^if w.is_alive():^
 ^ ^  ^ ^
 AssertionError^: ^can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

    if w.is_alive():  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

    assert self._parent_pid == os.getpid(), 'can only test a child process'
            ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^   ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    self._shutdown_workers()
^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
^    if w.is_alive():^
^ ^^^^^
 AssertionError :   can only test a child process^^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
if w.is_alive():
assert self._parent_pid == os.getpid(), 'can only test a child process'
               ^ ^ ^ ^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^^ ^  ^^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^
^AssertionError^: ^^can only test a child process^
^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^^    ^^^if w.is_alive():^
 ^ ^    ^^^ ^^^^^^^^^^^
AssertionError^^: can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

Traceback (most recent call last):
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
assert self._parent_pid == os.getpid(), 'can only test a child process'
     self._shutdown_workers()
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():
            ^^^^^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'
  ^ ^ ^^ ^ ^  ^^ ^ ^ ^^^^^^
^AssertionError^: ^can only test a child process
^^^Exception ignored in: ^^^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^^^self._shutdown_workers()^
```

```
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^ ^ ^ ^  ^  ^^^^^^^
^AssertionError: ^can only test a child process^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^

Traceback (most recent call last):
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    assert self._parent_pid == os.getpid(), 'can only test a child process'    self._shutdown_workers()

   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
     if w.is_alive():
             ^ ^ ^^^^^^^^^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^
^^AssertionError^: ^can only test a child process^
^^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()^^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():
^  ^^^  ^ ^ ^ ^^^^^^^^^^
^AssertionError: ^can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
Traceback (most recent call last):
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
assert self._parent_pid == os.getpid(), 'can only test a child process'
self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
       if w.is_alive():
           ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^ ^ ^ ^ ^ ^ ^ ^ ^  ^
^AssertionError^: can only test a child process^
^^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
```

```
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^^    ^self._shutdown_workers()^^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^^^^    ^if w.is_alive():^
^ ^ ^ ^ ^  ^ ^^^^^
AssertionError: can only test a child process^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^self._shutdown_workers()

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    assert self._parent_pid == os.getpid(), 'can only test a child process'
if w.is_alive():
            ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
 ^ ^  ^^^   ^^  ^ ^ ^^^^^^^^^^^^^^^^^^
^AssertionError^^^: ^can only test a child process^^
^^^^^^^^^^^^^^
AssertionError: can only test a child process


Epoch 34/50 | Train: total=87.5551, recon=68.7518, kl=12.5355 | Test: total=87.9997, recon=69.1830, kl=12.5444




Epoch 35/50 | Train: total=87.3730, recon=68.4857, kl=12.5915 | Test: total=88.1277, recon=69.1582, kl=12.6464




Epoch 36/50 | Train: total=87.2953, recon=68.2791, kl=12.6774 | Test: total=87.8733, recon=68.7088, kl=12.7764




Epoch 37/50 | Train: total=87.1375, recon=68.0419, kl=12.7304 | Test: total=87.9665, recon=68.7653, kl=12.8008




Epoch 38/50 | Train: total=87.0732, recon=67.8485, kl=12.8165 | Test: total=87.6244, recon=68.5700, kl=12.7030
```

```
Epoch 39/50 | Train: total=86.9574, recon=67.6846, kl=12.8485 | Test: total=87.5903, recon=68.0737, kl=13.0111


Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
Exception ignored in:   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
self._shutdown_workers()
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
self._shutdown_workers()
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
if w.is_alive():
if w.is_alive():
            ^ ^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/lib/python3.12/multiprocessing/process.py", line 160

      assert self._parent_pid == os.getpid(), 'can only test a child process'
                  ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError^:
can only test a child processAssertionError
: Exception ignored in: can only test a child process<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Traceback (most recent call last):

Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
        self._shutdown_workers()self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        if w.is_alive():if w.is_alive():

              ^^^^^^^^^^^^^^^^^^^^^^^^
```

```
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
     assert self._parent_pid == os.getpid(), 'can only test a child process'
                   ^ ^^^
```

```
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
       assert self._parent_pid == os.getpid(), 'can only test a child process'
         ^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^AssertionError^^: can only test a child process^
^^
AssertionErrorException ignored in: : can only test a child process<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

Traceback (most recent call last):
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        self._shutdown_workers()if w.is_alive():

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
       if w.is_alive():
        ^ ^ ^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^
    assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/lib/python3.12/multiprocessing/process.py", line

    assert self._parent_pid == os.getpid(), 'can only test a child process'
                     ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process

AssertionError: Exception ignored in: can only test a child process<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

Traceback (most recent call last):
Exception ignored in:   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
    Traceback (most recent call last):
self._shutdown_workers()  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        if w.is_alive():
self._shutdown_workers()
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
       if w.is_alive():
```

```
      if w.is_alive():
     ^ ^  ^^^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
             ^ ^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^^Exception ignored in: ^
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>AssertionError:
can only test a child processTraceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
     self._shutdown_workers()
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():
 ^  ^ ^ ^ ^^ ^ ^^^^^^^^^^
^^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^ ^ ^^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^

Traceback (most recent call last):
AssertionError:   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
can only test a child process
self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
Exception ignored in:     if w.is_alive():
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
  Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
       self._shutdown_workers() ^
```

```
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^ ^ ^^ ^ ^ ^ ^
 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^^  ^ ^ ^^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process' ^
^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError^: ^can only test a child process
^^Exception ignored in: ^^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^^Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
AssertionError    : self._shutdown_workers()can only test a child process

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
Exception ignored in:     <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>if w.is_alive():

  Traceback (most recent call last):
     File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  ^    ^self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^ ^^^ ^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
^ ^ ^ ^  ^ ^^ ^ ^ ^ ^ ^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^^ ^ ^  ^ ^ ^^ ^ ^^^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():
^ ^ ^ ^    ^^^^
^AssertionError^: ^can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
```

```
Traceback (most recent call last):
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
assert self._parent_pid == os.getpid(), 'can only test a child process'
self._shutdown_workers()
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():
            ^ ^^^^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^  ^ ^ ^  ^ ^^ ^^^^^^
^AssertionError^: ^can only test a child process^^
^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process


Epoch 40/50 | Train: total=86.9050, recon=67.5808, kl=12.8828 | Test: total=87.6366, recon=68.0818, kl=13.0366




Epoch 41/50 | Train: total=86.8295, recon=67.4549, kl=12.9164 | Test: total=87.5595, recon=67.8878, kl=13.1145




Epoch 42/50 | Train: total=86.7648, recon=67.3327, kl=12.9548 | Test: total=87.7580, recon=68.4470, kl=12.8740




Epoch 43/50 | Train: total=86.6758, recon=67.2262, kl=12.9664 | Test: total=87.5131, recon=68.1309, kl=12.9215




Epoch 44/50 | Train: total=86.5804, recon=67.0373, kl=13.0288 | Test: total=87.3231, recon=67.7491, kl=13.0494




Epoch 45/50 | Train: total=86.4772, recon=66.8220, kl=13.1035 | Test: total=87.0820, recon=67.3402, kl=13.1612


Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
```

```
Traceback (most recent call last):
Exception ignored in:   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
self._shutdown_workers()
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        self._shutdown_workers()if w.is_alive():

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        if w.is_alive():
  ^^ ^   ^ ^ ^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^  ^ ^ ^^ ^ ^ ^^^^^^^^^^^^^
```

```
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
AssertionError:     can only test a child processif w.is_alive():

 Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    if w.is_alive():^
^ ^^ ^ ^  ^ ^ ^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^  ^^ ^
    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^ ^ ^   ^  ^ ^ ^^  ^^^
```

```
Exception ignored in: AssertionError<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>:
can only test a child processTraceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
self._shutdown_workers()Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
        self._shutdown_workers()if w.is_alive():
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():

           ^ ^^^^^^^^^^^^^^^^^^^^^^^

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'assert self._parent_pid == os.getpid(), 'can only test a

                    ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError
: can only test a child processAssertionError
: Exception ignored in: can only test a child process
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Exception ignored in:     <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
Traceback (most recent call last):
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
if w.is_alive():
self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
     if w.is_alive():
      ^^^ ^ ^ ^ ^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
       ^ ^ ^ ^  ^ ^ ^ ^^^^^^^^^^^^^^^^^^^
```

```
^^^Exception ignored in: ^
AssertionError<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
:   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
can only test a child process
    Exception ignored in: self._shutdown_workers()<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
if w.is_alive():
if w.is_alive():
            ^ ^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^
    assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/lib/python3.12/multiprocessing/process.py", line

     assert self._parent_pid == os.getpid(), 'can only test a child process'
                ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
AssertionError:     self._shutdown_workers()
can only test a child process  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_wo

if w.is_alive():
Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
  Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers() ^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^^if w.is_alive():^^
^ ^  ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^^assert self._parent_pid == os.getpid(), 'can only test a child process'
^  ^ ^ ^ ^^ ^ ^ ^ ^
    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'
^^ ^^ ^ ^ ^^ ^  ^^ ^ ^  ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
```

```
^^^AssertionError^: can only test a child process^
^^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

    if w.is_alive():
AssertionError:  can only test a child process
  Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^^self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^if w.is_alive():
^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
         ^ ^ ^  ^^ ^ ^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^ ^ ^ ^^ ^^ ^ ^ ^^ ^ ^ ^ ^^^^^^^^^
^AssertionError^^^: can only test a child process^
^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^^
 ^^ ^ ^ ^ ^ ^^
AssertionError : ^^can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^self._shutdown_workers()^^^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^
if w.is_alive():  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

      assert self._parent_pid == os.getpid(), 'can only test a child process'
        ^ ^ ^^ ^ ^ ^ ^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
```

```
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^ ^ ^ ^ ^ ^ ^ ^^
^AssertionError^^: can only test a child process^^
^^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
self._shutdown_workers()
assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/

      if w.is_alive():
               ^^^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^  ^ ^ ^ ^^ ^^^^^^^^
^AssertionError^: can only test a child process^
^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process


Epoch 46/50 | Train: total=86.3881, recon=66.6255, kl=13.1751 | Test: total=87.0705, recon=67.6348, kl=12.9572




Epoch 47/50 | Train: total=86.2089, recon=66.3747, kl=13.2228 | Test: total=87.0633, recon=67.8707, kl=12.7951




Epoch 48/50 | Train: total=86.0947, recon=66.1169, kl=13.3185 | Test: total=86.8252, recon=67.4338, kl=12.9276
```

```
Epoch 49/50 | Train: total=86.0297, recon=65.9619, kl=13.3785 | Test: total=86.8756, recon=67.1290, kl=13.1644



Epoch 50/50 | Train: total=85.8540, recon=65.7183, kl=13.4238 | Test: total=86.7765, recon=66.7700, kl=13.3377

Training Convolutional VAE...



Epoch 01/50 | Train: total=128.0009, recon=113.2258, kl=9.8501 | Test: total=103.4562, recon=86.1203, kl=11.5573


Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    Exception ignored in: self._shutdown_workers()<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
        if w.is_alive():self._shutdown_workers()

   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():
     ^^^^ ^^ ^  ^ ^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
                ^^ ^ ^^^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError^: can only test a child process^
^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

AssertionErrorTraceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    : can only test a child processself._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    Exception ignored in: if w.is_alive():
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
```

```
  Traceback (most recent call last):
    ^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^^self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    if w.is_alive():^
^ ^
      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  ^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^^^ ^^  ^ ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process' ^
^ ^ ^ ^ ^ ^^ ^ ^ ^  ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^^^Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
AssertionError: can only test a child process
self._shutdown_workers()
Exception ignored in:   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
    Traceback (most recent call last):
if w.is_alive():  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

      self._shutdown_workers()
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
       if w.is_alive():^
 ^ ^^  ^^  ^ ^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
  ^^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
     ^ ^  ^^^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^Exception ignored in: ^
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
AssertionErrorTraceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
:     can only test a child processself._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
Exception ignored in:     if w.is_alive():<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers()
    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    ^^^^if w.is_alive():
^^ ^ ^^^^ ^
    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
 ^^  ^ ^ ^ ^ ^ ^^ ^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^  ^ ^  ^  ^   ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^AssertionError^: ^can only test a child process^
^^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

    AssertionError: can only test a child process
if w.is_alive():
 Exception ignored in:    <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
 ^    ^^self._shutdown_workers()^^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():
^^ ^  ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
       assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^^  ^ ^  ^ ^  ^ ^^ ^^^
^^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
 ^^^ ^ ^ ^ ^ ^  ^ ^^ ^ ^^^^^^^^^^^^^^^^
^AssertionError: ^can only test a child process^
^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    if w.is_alive():^
```

```
^ ^ ^ ^ ^ ^  ^^^^
^AssertionError: ^can only test a child process^
^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'self._shutdown_workers()

   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
     if w.is_alive():
            ^^ ^^^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
 ^ ^  ^ ^^^^ ^ ^  ^ ^^ ^
^AssertionError^: ^can only test a child process^
^^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^^^^    self._shutdown_workers()^^
^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():
  ^ ^ ^
  AssertionError^: can only test a child process^^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        if w.is_alive():assert self._parent_pid == os.getpid(), 'can only test a child process'

            ^ ^^ ^  ^^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^  ^ ^ ^ ^ ^ ^   ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^^
self._shutdown_workers()^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_worker
```

```
^    ^if w.is_alive():^
^
AssertionError :  can only test a child process
 Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():
^^ ^ ^^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     assert self._parent_pid == os.getpid(), 'can only test a child process'
^^ ^^ ^^ ^ ^ ^ ^^ ^
    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^assert self._parent_pid == os.getpid(), 'can only test a child process'
 ^ ^^ ^ ^ ^ ^^ ^ ^^ ^^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError^: ^can only test a child process^
^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^^if w.is_alive():^

 AssertionError : can only test a child process
  Exception ignored in:    <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^ ^^  ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
 ^ ^^ ^ ^  ^ ^  ^ ^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^  ^ ^ ^  ^ ^ ^ ^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process
^^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
```

```
    self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    if w.is_alive():

 AssertionError: can only test a child process
    Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    self._shutdown_workers()^^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^if w.is_alive():
^ ^ ^  ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     assert self._parent_pid == os.getpid(), 'can only test a child process'
^  ^ ^^ ^  ^ ^ ^ ^ ^ ^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^  ^^ ^  ^^ ^  ^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    ^if w.is_alive():^^
^^
 AssertionError :   can only test a child process
 ^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'if w.is_alive():

             ^  ^^ ^ ^^^^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^  ^ ^ ^ ^  ^ ^ ^^^^^^^^^^^^^^^^^
^AssertionError^^: ^can only test a child process^
^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
```

```
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Exception ignored in:     <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
Traceback (most recent call last):
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
if w.is_alive():
     self._shutdown_workers()
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():
  ^  ^^ ^ ^ ^ ^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
       assert self._parent_pid == os.getpid(), 'can only test a child process'
             ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^:
AssertionErrorcan only test a child process:
can only test a child process
Exception ignored in: Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0><function _MultiProcessir

Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
        self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
self._shutdown_workers()
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
if w.is_alive():
if w.is_alive():
          ^ ^^ ^^^^^^^^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^
assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/lib/python3.12/multiprocessing/process.py", line 160

     assert self._parent_pid == os.getpid(), 'can only test a child process'
                   ^ ^^^^^^^^^^^^^^^^^^^
```

```
^AssertionError
: AssertionErrorcan only test a child process:
can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Exception ignored in: Traceback (most recent call last):
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/data

    Traceback (most recent call last):
self._shutdown_workers()  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
self._shutdown_workers()    if w.is_alive():

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
         if w.is_alive():
  ^ ^ ^ ^ ^^ ^ ^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'
^^ ^  ^^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
    ^ ^^ ^   ^ ^ ^ ^ ^^^^^^^^^
```

```
 ^ ^ ^ ^ ^ ^ ^  ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
AssertionError    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
:     can only test a child processif w.is_alive():

 Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
   ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    self._shutdown_workers()^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^if w.is_alive():^
^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
^ ^ ^ ^ ^ ^^ ^ ^ ^^ ^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError: ^can only test a child process^^
^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^^
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():

 AssertionError :  can only test a child process
   ^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^^^    ^if w.is_alive():

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^ ^ ^^   ^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
```

```
    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^  ^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^
^AssertionError^: ^^can only test a child process^
^^^Exception ignored in: ^^^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()
^^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

    AssertionErrorif w.is_alive():
:  can only test a child process
    Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^if w.is_alive():^
^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     assert self._parent_pid == os.getpid(), 'can only test a child process'
    ^ ^ ^ ^   ^  ^ ^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^^ ^ ^ ^^  ^ ^ ^^ ^ ^^^^^^^^^^^^^^^^^
AssertionError^^: can only test a child process^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    if w.is_alive():^
^  ^ ^ ^ ^  ^^^^^^^^^^^
^AssertionError^: ^^can only test a child process^

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    Exception ignored in: assert self._parent_pid == os.getpid(), 'can only test a child process'<function _MultiProcessingDataLoaderIte

 Traceback (most recent call last):
    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers()
    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      ^if w.is_alive():^
^ ^^  ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^
```

```
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    assert self._parent_pid == os.getpid(), 'can only test a child process'
^ ^ ^   ^ ^ ^   ^ ^^^^^^^
^AssertionError^: ^can only test a child process^^
^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Epoch 02/50 | Train: total=99.6033, recon=81.8296, kl=11.8491 | Test: total=95.1989, recon=74.8917, kl=13.5381



Epoch 03/50 | Train: total=93.5308, recon=73.4248, kl=13.4040 | Test: total=91.6034, recon=69.8669, kl=14.4910



Epoch 04/50 | Train: total=90.7273, recon=69.7933, kl=13.9560 | Test: total=89.3036, recon=68.0967, kl=14.1379



Epoch 05/50 | Train: total=89.0461, recon=67.6685, kl=14.2517 | Test: total=88.4056, recon=66.7176, kl=14.4587



Epoch 06/50 | Train: total=88.5374, recon=66.8803, kl=14.4381 | Test: total=87.9416, recon=66.1966, kl=14.4967



Epoch 07/50 | Train: total=87.9836, recon=66.0780, kl=14.6037 | Test: total=87.3988, recon=65.3968, kl=14.6680



Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

Traceback (most recent call last):
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
self._shutdown_workers()
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
if w.is_alive():
     if w.is_alive():
          ^  ^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/lib/python3.12/multiprocessing/process.py", line 160

     assert self._parent_pid == os.getpid(), 'can only test a child process'
                     ^^^^^^^^^^^^^^^^^^^
```

```
      Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^^^self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():
^  ^ ^  ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^^ ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^^ ^ ^^ ^^ ^ ^ ^ ^^  ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^
if w.is_alive():AssertionError
  :   can only test a child process
 ^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    if w.is_alive():^

    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
       assert self._parent_pid == os.getpid(), 'can only test a child process'
    ^ ^ ^  ^ ^ ^ ^ ^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^ ^^ ^ ^  ^^ ^^ ^ ^ ^ ^^ ^^^^^^^^^^^^
AssertionError^^: ^can only test a child process^
^^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^self._shutdown_workers()^^^^^^^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^if w.is_alive():
^^^^
AssertionError :  can only test a child process
```

```
AssertionError : can only test a child process
 Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^^self._shutdown_workers()
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
 ^^  ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^ ^ ^ ^    ^ ^ ^ ^ ^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^  ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():

AssertionError : can only test a child process
  Exception ignored in:   <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^^^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    if w.is_alive():
^ ^^ ^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
  ^ ^^  ^ ^ ^ ^  ^ ^ ^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^ ^ ^^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^^^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^^self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^^^^
      ^
```

```
^^^^AssertionError^: ^^^can only test a child process^^
^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

Traceback (most recent call last):
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
        assert self._parent_pid == os.getpid(), 'can only test a child process'self._shutdown_workers()

   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
     if w.is_alive():
            ^^^^^^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^ ^ ^ ^^ ^ ^ ^ ^
 AssertionError :  can only test a child process
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^^^^    ^if w.is_alive():^^
^^^^  ^ ^ ^^^^ ^ ^ ^^^^^
AssertionError: can only test a child process^
^^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
if w.is_alive():
assert self._parent_pid == os.getpid(), 'can only test a child process'
            ^^ ^  ^  ^^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^  ^ ^ ^ ^^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
    ^if w.is_alive():^^
^ ^^ ^ ^ ^
  AssertionError^: ^can only test a child process
^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
if w.is_alive():
 assert self._parent_pid == os.getpid(), 'can only test a child process'
         ^ ^ ^^^^ ^ ^^ ^ ^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^ ^^ ^  ^ ^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError^: can only test a child process^^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    self._shutdown_workers()^^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^^
    ^^ ^^
AssertionError ^: can only test a child process^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
self._shutdown_workers()
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
assert self._parent_pid == os.getpid(), 'can only test a child process'
     if w.is_alive():
               ^ ^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^  ^  ^ ^ ^  ^ ^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Epoch 08/50 | Train: total=87.6002, recon=65.5419, kl=14.7056 | Test: total=87.4792, recon=65.4066, kl=14.7151
```

```
Epoch 09/50 | Train: total=87.3677, recon=65.2490, kl=14.7458 | Test: total=86.8027, recon=64.8996, kl=14.6021



Epoch 10/50 | Train: total=87.1597, recon=64.9100, kl=14.8332 | Test: total=86.6235, recon=64.6397, kl=14.6559



Epoch 11/50 | Train: total=87.0071, recon=64.7193, kl=14.8585 | Test: total=86.6149, recon=63.8948, kl=15.1468



Epoch 12/50 | Train: total=86.6839, recon=64.2270, kl=14.9713 | Test: total=86.2207, recon=63.7908, kl=14.9533



Epoch 13/50 | Train: total=86.4477, recon=63.9214, kl=15.0175 | Test: total=86.1303, recon=63.9604, kl=14.7800


Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^
^^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    if w.is_alive():^
^ ^^  ^^
 AssertionError  :  can only test a child process^
^^^^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
```

```
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        self._shutdown_workers()assert self._parent_pid == os.getpid(), 'can only test a child process'
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

      if w.is_alive():
                 ^^^^^^^^^^^^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    assert self._parent_pid == os.getpid(), 'can only test a child process'^^
 ^ ^ ^^     ^ ^ ^ ^^^^^^^^^^^^^^^
AssertionError^^: ^can only test a child process
^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^^self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^^if w.is_alive():
^ ^  ^^ ^  ^ ^^^
^AssertionError: ^can only test a child process^
^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    self._shutdown_workers()
assert self._parent_pid == os.getpid(), 'can only test a child process'
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
       if w.is_alive():
              ^^^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^   ^^ ^ ^ ^  ^ ^  ^^^^^^^^^^^^^^^^^^
^^AssertionError^: ^can only test a child process^
^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^self._shutdown_workers()^^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    ^if w.is_alive():^
  ^ ^  ^^
 AssertionError^^: ^can only test a child process^
```

```
^Exception ignored in: ^^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^
self._shutdown_workers()  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        if w.is_alive():assert self._parent_pid == os.getpid(), 'can only test a child process'

              ^ ^^^^^  ^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'
^ ^^ ^ ^^^^ ^ ^ ^  ^^ ^^ ^ ^^^^^^^^
^^^AssertionError^: ^can only test a child process^
^^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    if w.is_alive():^
  ^ ^ ^  ^ ^^^^^^^^^^^^^^^^^
^AssertionError^: can only test a child process^

Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>  File "/usr/lib/python3.12/multiprocessing/pro

    Traceback (most recent call last):
assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/

     self._shutdown_workers()
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():
            ^^^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^  ^ ^^ ^ ^
AssertionError  : can only test a child process
Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():^^
^ ^^ ^  ^ ^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^
```

```
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
AssertionError    : assert self._parent_pid == os.getpid(), 'can only test a child process'can only test a child process

   Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
     self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    if w.is_alive():^^
 ^^  ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    ^assert self._parent_pid == os.getpid(), 'can only test a child process'

AssertionError    : can only test a child process
   Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    if w.is_alive():
^^ ^ ^^ ^^ ^^ ^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^

AssertionError  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    : can only test a child processassert self._parent_pid == os.getpid(), 'can only test a child process'

Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers()
    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    ^if w.is_alive():^
   ^ ^  ^ ^^^^^^^^^^^^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^ ^  ^ ^ ^^ ^ ^   ^ ^^
^AssertionError^: ^can only test a child process
^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^self._shutdown_workers()
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():^
```

```
    if w.is_alive():
 ^^^ ^ ^ ^^ ^ ^ ^^^^^^^^^^^^^^^^^
AssertionError: ^can only test a child process

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
     File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
       self._shutdown_workers()
 ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    if w.is_alive():^
^^^^  ^^ ^ ^   ^^^^^^^^^^^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^  ^
   AssertionError : can only test a child process
 Exception ignored in:   <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^^^^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^ ^ ^ ^ ^   ^^^^^^^^^^^^^^^^^^^^^^^


AssertionError  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process': can only test a child process

 Exception ignored in:      <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    self._shutdown_workers()^^^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():
^^  ^  ^ ^  ^^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^
  AssertionError :   can only test a child process
 ^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^^self._shutdown_workers()
```

```
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^^
^ ^^ ^ ^ ^  ^^ ^^^^^^^^^^
AssertionError^: ^^can only test a child process^
^^^Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in

    assert self._parent_pid == os.getpid(), 'can only test a child process'
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
     self._shutdown_workers()
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():
             ^^^^^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
 ^ ^  ^  ^^ ^  ^  ^^^^^^^^^^^^
^^AssertionError: ^can only test a child process^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^if w.is_alive():^
 ^ ^^ ^ ^ ^
 AssertionError^: ^can only test a child process^
^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process


Exception ignored in: Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0><function _MultiProcessin

Traceback (most recent call last):
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
        self._shutdown_workers()self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
        if w.is_alive():if w.is_alive():

             ^ ^^^^^^^^^^^^^^^^^^^^^^^

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'assert self._parent_pid == os.getpid(), 'can only test a

                     ^^^^^^^^^^^^^^^^^^^
```

```
        self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      ^if w.is_alive():^
^ ^ ^  ^ ^ ^ ^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
 ^ ^^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
     ^ ^ ^ ^ ^ ^^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: can only test a child process^
^^^^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^
Traceback (most recent call last):
AssertionError  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
:     can only test a child process
self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>    if w.is_alive():

Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers()
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      ^if w.is_alive():
^  ^ ^^  ^  ^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^

   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'
            ^ ^ ^^^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^^^: can only test a child process
^^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^
self._shutdown_workers()AssertionError:
can only test a child process  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_wo

    Exception ignored in: if w.is_alive():<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

Traceback (most recent call last):
```

```
Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
       self._shutdown_workers()
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
 ^    if w.is_alive():^
^ ^  ^^ ^ ^ ^ ^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
 ^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     assert self._parent_pid == os.getpid(), 'can only test a child process'
          ^ ^ ^  ^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError: ^can only test a child process^
^^^Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>AssertionError
: Traceback (most recent call last):
can only test a child process
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/data

    Traceback (most recent call last):
if w.is_alive():  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
       if w.is_alive():
    ^ ^ ^ ^^ ^ ^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    assert self._parent_pid == os.getpid(), 'can only test a child process'^^^
^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
         ^ ^ ^ ^^ ^ ^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: can only test a child process^^
^^^
Exception ignored in: AssertionError<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>: can only test a child process

Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
self._shutdown_workers()Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
```

```
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        self._shutdown_workers()if w.is_alive():

   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():
      ^ ^ ^ ^ ^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^
    assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/lib/python3.12/multiprocessing/process.py", line

    assert self._parent_pid == os.getpid(), 'can only test a child process'
                  ^^ ^ ^^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^AssertionError^: ^^^can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

    AssertionErrorself._shutdown_workers():
can only test a child process
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers()
 ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^ ^ ^ ^^ ^ ^ ^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^  ^ ^ ^ ^^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
       ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

AssertionError    if w.is_alive():
```

```
:  can only test a child process
  Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^^ ^  ^^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
^ ^ ^ ^ ^ ^   ^ ^ ^ ^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^   ^ ^ ^  ^ ^^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError^: can only test a child process^
^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^ ^
 AssertionError :  can only test a child process
  Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
   ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^ ^  ^ ^ ^ ^ ^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^ ^ ^ ^ ^ ^  ^^ ^^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^^
^^^^^^^^^^^^
AssertionError: can only test a child process
Epoch 14/50 | Train: total=86.3267, recon=63.6545, kl=15.1148 | Test: total=85.7950, recon=62.8305, kl=15.3097
```

```
Epoch 15/50 | Train: total=86.2347, recon=63.4266, kl=15.2054 | Test: total=85.7831, recon=62.7907, kl=15.3283



Epoch 16/50 | Train: total=86.0815, recon=63.1650, kl=15.2777 | Test: total=86.2107, recon=63.5583, kl=15.1016



Epoch 17/50 | Train: total=85.9820, recon=62.9753, kl=15.3378 | Test: total=85.8842, recon=62.3868, kl=15.6649



Epoch 18/50 | Train: total=85.7166, recon=62.6467, kl=15.3799 | Test: total=85.8999, recon=62.4747, kl=15.6168



Epoch 19/50 | Train: total=85.7082, recon=62.5615, kl=15.4311 | Test: total=85.4594, recon=62.5425, kl=15.2779



Exception ignored in: Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0><function _MultiProcessir

Traceback (most recent call last):
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
self._shutdown_workers()
    if w.is_alive():
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():
          ^ ^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
assert self._parent_pid == os.getpid(), 'can only test a child process'
assert self._parent_pid == os.getpid(), 'can only test a child process'
                     ^^^^^^^^^^^^^^^^^^^
```

```
AssertionError: AssertionError: can only test a child processcan only test a child process

Exception ignored in: Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    Traceback (most recent call last):
self._shutdown_workers()  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
 if w.is_alive():
         ^  ^^^^^^^^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'
assert self._parent_pid == os.getpid(), 'can only test a child process'
                   ^^ ^  ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^


AssertionErrorAssertionError: : can only test a child processcan only test a child process

Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
Exception ignored in:   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
    Traceback (most recent call last):
self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        if w.is_alive():self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():
   ^ ^ ^^ ^^^ ^^ ^ ^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^  ^ ^ ^^ ^^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
```

```
      assert self._parent_pid == os.getpid(), 'can only test a child process'
   ^ ^   ^ ^ ^ ^ ^^ ^ ^^^
```

```
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     assert self._parent_pid == os.getpid(), 'can only test a child process'
     ^^ ^ ^  ^ ^ ^ ^ ^^^
```

```
^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     assert self._parent_pid == os.getpid(), 'can only test a child process'
              ^^ ^ ^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError: ^can only test a child process
^^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

Traceback (most recent call last):
AssertionError  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    : self._shutdown_workers()can only test a child process

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
if w.is_alive():Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
          self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^if w.is_alive():
^^^ ^  ^ ^ ^^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
 ^ ^ ^ ^  ^ ^ ^ ^
 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^ ^  ^ ^^  ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process^^
^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():^
      ^ ^^^^^^^^^
^AssertionError: ^^can only test a child process^
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

Traceback (most recent call last):
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
        assert self._parent_pid == os.getpid(), 'can only test a child process'self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      if w.is_alive():
             ^ ^ ^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'
^ ^ ^ ^ ^ ^ ^ ^ ^^ ^ ^ ^^^^^^^^^^^^^^^^^^^^
^AssertionError^^^^: ^can only test a child process^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^^if w.is_alive():^
AssertionError:
   can only test a child process
   Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^self._shutdown_workers()^^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^if w.is_alive():

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      assert self._parent_pid == os.getpid(), 'can only test a child process'
     ^^ ^^ ^ ^^ ^ ^ ^ ^ ^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^  ^^ ^  ^ ^ ^ ^ ^  ^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^can only test a child process
^^^^^^^^^^^^^^
AssertionError: can only test a child process
Epoch 20/50 | Train: total=85.5955, recon=62.3720, kl=15.4823 | Test: total=85.4573, recon=62.0610, kl=15.5975




Epoch 21/50 | Train: total=85.4069, recon=62.1526, kl=15.5029 | Test: total=85.3350, recon=62.0848, kl=15.5002




Epoch 22/50 | Train: total=85.3303, recon=62.0603, kl=15.5134 | Test: total=84.8797, recon=61.7347, kl=15.4301
```

```
Epoch 23/50 | Train: total=85.1730, recon=61.8640, kl=15.5393 | Test: total=84.9721, recon=61.6410, kl=15.5541



Epoch 24/50 | Train: total=85.1423, recon=61.7930, kl=15.5662 | Test: total=85.3432, recon=62.3672, kl=15.3173



Epoch 25/50 | Train: total=85.0570, recon=61.6118, kl=15.6302 | Test: total=85.6518, recon=62.3796, kl=15.5148



Exception ignored in: Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    Exception ignored in:   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
self._shutdown_workers()    <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

self._shutdown_workers()Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    self._shutdown_workers()
if w.is_alive():
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
          Exception ignored in:  if w.is_alive():if w.is_alive():

<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
  Traceback (most recent call last):
  ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      ^  ^ self._shutdown_workers()^^
^^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^ ^^^    ^^^^^if w.is_alive():^^^^^^^
^^ ^^^ ^
^ ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^ ^     ^^assert self._parent_pid == os.getpid(), 'can only test a child process' ^
```

```
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
assert self._parent_pid == os.getpid(), 'can only test a child process'^
    ^ ^ ^assert self._parent_pid == os.getpid(), 'can only test a child process'  ^
 ^   ^    ^  ^ ^   ^ ^
  ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
   ^ ^       ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^
^^^^^^ ^^^ ^^^^^^^^ ^^^ ^ ^^ ^^^ ^^^ ^^^ ^^^^ ^^ ^^^^^^^^
```

```
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^         assert self._parent_pid == os.getpid(), 'can only test a child process' assert self._parent_pid == os.getpid(), 'can only test


    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^     ^^  assert self._parent_pid == os.getpid(), 'can only test a child process' ^
    ^^      ^   ^    ^ ^   ^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^       ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^ ^^
 ^^^^^ ^^^^^^ ^^^ ^ ^^^ ^ ^^^^ ^^^ ^^^^ ^^^^ ^ ^^^^^^
```

```
    ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^     ^
if w.is_alive(): ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

 ^
 assert self._parent_pid == os.getpid(), 'can only test a child process'    File "/usr/lib/python3.12/multiprocessing/process.py", line

     assert self._parent_pid == os.getpid(), 'can only test a child process'
            ^ ^   ^^   ^ ^^ ^ ^^  ^ ^ ^^ ^ ^^^^^^^^^^^^^^^^^^^^^^
^^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^^^^ ^^^^^^^ ^^^ ^^ ^^^^ ^^^^^ ^^ ^^^ ^^^ ^^^
^^ ^AssertionError^^^: ^^^^^can only test a child process^^^
^^^^^^^^^^Exception ignored in: ^^^^
^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^AssertionError
^: Traceback (most recent call last):

^can only test a child process  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
AssertionError^
    : self._shutdown_workers()^can only test a child processException ignored in:
^
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/data
^
    Exception ignored in: if w.is_alive():^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

     ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0> ^  self._shutdown_workers()
^Traceback (most recent call last):

 ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^if w.is_alive():     ^
^self._shutdown_workers()^ ^^ ^
^ ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^ ^      ^^if w.is_alive(): ^
^^ ^
^^AssertionError ^^:  ^^can only test a child process ^^
 ^^
 ^ Exception ignored in:   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^assert self._parent_pid == os.getpid(), 'can only test a child process'^Traceback (most recent call last):
```

```
^
^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^         ^assert self._parent_pid == os.getpid(), 'can only test a child process'self._shutdown_workers() ^

 ^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^     ^  ^if w.is_alive():  ^

      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^ ^      ^assert self._parent_pid == os.getpid(), 'can only test a child process'  ^
^   ^   ^ ^ ^ ^^^ ^^^^^^^ ^^^^^ ^ ^^ ^^^^^^^ ^^^^^^^^^^^
^^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^    ^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^^ ^^^^^  ^^ ^^^^ ^ ^^^ ^ ^^^^^^ ^^
^AssertionError ^^ ^: ^^^can only test a child process^^^
^^^^^Exception ignored in:
^^AssertionError<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^: ^
can only test a child process^^
^Exception ignored in: Traceback (most recent call last):
^^self._shutdown_workers()  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^
^^Traceback (most recent call last):
    ^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^
^      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^self._shutdown_workers()^

    AssertionError^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
if w.is_alive():^: ^
^    can only test a child processif w.is_alive():^ ^

^ ^Exception ignored in:   <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^ Traceback (most recent call last):
     File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^  ^    ^^^^self._shutdown_workers()^ ^
^^^ ^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^
    AssertionError^^if w.is_alive():^: ^^can only test a child process^^

^  ^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
Traceback (most recent call last):
```

```
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^assert self._parent_pid == os.getpid(), 'can only test a child process' ^^
^    ^ self._shutdown_workers()^
^ ^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^ ^
if w.is_alive():^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^^
 ^      ^ assert self._parent_pid == os.getpid(), 'can only test a child process' ^^
 ^ ^ ^
  ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^      ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^ ^^^  ^^ ^ ^ ^ ^ ^^ ^ ^^ ^ ^ ^^^ ^^^^  ^^^
^^ ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^^
^^^^^ ^^^^^ ^^^^^ ^^^^ ^^^^ ^^^
 ^AssertionError ^^^:  can only test a child process^
^^ ^^ Exception ignored in: ^^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^Traceback (most recent call last):
^ ^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^
^^    ^AssertionErrorself._shutdown_workers(): ^^can only test a child process

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^^^Exception ignored in: ^^    ^^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^if w.is_alive():
^^^Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
self._shutdown_workers()    ^ ^^^
^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
AssertionError ^:     ^ can only test a child process^if w.is_alive():
 ^
 Exception ignored in: ^ <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^^ ^Traceback (most recent call last):
^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      self._shutdown_workers()^
^^^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^^    ^^if w.is_alive():^^^^^
^^^^ ^^
^ ^AssertionError^ :  ^^ can only test a child process^ ^
^
 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
Exception ignored in: ^^    <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^assert self._parent_pid == os.getpid()
```

```
Exception ignored in:       <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>  assert self._parent_pid == os.getpid()
^
Traceback (most recent call last):

^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^     assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/local/lib/python3.12/dist-packages/torch/util
 ^
 ^     self._shutdown_workers() ^ ^
^    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
 ^       ^
if w.is_alive():  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

         assert self._parent_pid == os.getpid(), 'can only test a child process' ^ ^
  ^ ^ ^^  ^^^^^^^ ^^^ ^^ ^^^ ^^^^^ ^^^ ^^^^^ ^ ^ ^^^^^
^^^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^    ^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^
^^^  ^^^^ ^^ ^^^^ ^^^ ^^^^ ^^ ^^ ^^^ ^^ ^^^^^^^^
^^AssertionError^^^^^:
^^can only test a child process^AssertionError^
^: ^^can only test a child process^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

^^Exception ignored in: Traceback (most recent call last):
^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^    ^^^^self._shutdown_workers()^self._shutdown_workers()

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

AssertionError^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    : ^if w.is_alive():can only test a child process^

^if w.is_alive():^ Exception ignored in: ^
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^  Traceback (most recent call last):
^    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^ ^       self._shutdown_workers()^
 ^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

^AssertionError    ^^: if w.is_alive():^can only test a child process^^
^
^^^ ^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^ ^
```

```
^ ^Traceback (most recent call last):
^ ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^ ^     ^^self._shutdown_workers()


^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    assert self._parent_pid == os.getpid(), 'can only test a child process'
^if w.is_alive(): assert self._parent_pid == os.getpid(), 'can only test a child process'
 ^
 ^  ^  ^   ^   ^  ^    ^  ^
^ ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^     ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^
^^^^ ^^ ^^^^ ^^^^ ^^^^ ^^^ ^^^ ^^^^^^
 ^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^^    ^^ assert self._parent_pid == os.getpid(), 'can only test a child process'^^^^
^^^ ^^ ^^^^ ^^ ^^^ ^^^ ^^^ ^^^ ^^^ ^^ ^^^ ^^^^^^^^^^
^^^^AssertionError^^
^: AssertionError^^can only test a child process: ^^
can only test a child process^^^
^^Exception ignored in: ^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^Exception ignored in: ^
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^^Traceback (most recent call last):
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^    ^^self._shutdown_workers()^^
^^self._shutdown_workers()  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_worke
^^

^if w.is_alive():  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
AssertionError
^    ^: if w.is_alive(): can only test a child process
^
  ^^  ^Exception ignored in:  ^  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^   ^
 ^^ ^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

^^^^AssertionError    self._shutdown_workers()^: ^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^can only test a child process^^if w.is_alive():
^^
```

```
^^^Exception ignored in:
^^ <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>  File "/usr/lib/python3.12/multiprocessing/process.py", line 160,

Traceback (most recent call last):
assert self._parent_pid == os.getpid(), 'can only test a child process'
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^  self._shutdown_workers()

  ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
 ^    if w.is_alive():    ^
assert self._parent_pid == os.getpid(), 'can only test a child process'^
^  ^  ^  ^    ^  ^   ^ ^ ^ ^^
 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^     ^ ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^^^ ^^ ^^^ ^^^^ ^^^^ ^^^^^^^ ^^
^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^    ^ assert self._parent_pid == os.getpid(), 'can only test a child process'^^^
^^  ^   ^ ^^^^^^^ ^^^ ^ ^^^ ^^^ ^^^^ ^^^^^^^^^^ ^^^^^^^^^^^^

^^AssertionErrorAssertionError: : ^^can only test a child process^can only test a child process^
^
^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Exception ignored in:
^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^Traceback (most recent call last):

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^Traceback (most recent call last):
^^self._shutdown_workers()  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^        ^self._shutdown_workers()^^^^^^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^if w.is_alive():
     ^^
 ^if w.is_alive():AssertionError ^
      :  ^
^ can only test a child process^^ ^^Exception ignored in:  ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^ ^^
^^Traceback (most recent call last):
^^^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    ^^^^self._shutdown_workers()^^
^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
AssertionError^^: ^    ^can only test a child process^
```

```
^if w.is_alive():^^Exception ignored in:

^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>   File "/usr/lib/python3.12/multiprocessing/process.py", line 160,


  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     Traceback (most recent call last):
       File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
assert self._parent_pid == os.getpid(), 'can only test a child process'assert self._parent_pid == os.getpid(), 'can only test a child pr

   ^  self._shutdown_workers() ^
  ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  ^  ^      ^if w.is_alive():^
 ^  ^   ^   ^^ ^^^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^ ^    ^^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^^
^^^^ ^ ^^^^ ^^^ ^^^ ^^^ ^^^ ^^ ^^^
^^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^ ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^
^^^ ^^^^ ^^ ^^^^^ ^^ ^^^ ^^^ ^^^^ ^^^ ^^^^ ^^
 ^^^AssertionError^^: ^^can only test a child process^^
^
^^AssertionError^^^^^^Exception ignored in: : ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>can only test a chilc

Traceback (most recent call last):
^^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^    ^
^^Traceback (most recent call last):
^self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^    ^^if w.is_alive():    ^
self._shutdown_workers()^^ ^^

^AssertionError ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^:  can only test a child process^
 ^^^^^if w.is_alive():^Exception ignored in:
^^
^AssertionError<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0> ^:
^ Traceback (most recent call last):
can only test a child process ^ ^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^Exception ignored in:  ^self._shutdown_workers()<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
```

```
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>


   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
Traceback (most recent call last):
^      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^assert self._parent_pid == os.getpid(), 'can only test a child process'    ^
self._shutdown_workers()    ^if w.is_alive():
^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
   ^   ^      ^if w.is_alive():  ^
 ^ ^ ^  ^
^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^     ^  ^assert self._parent_pid == os.getpid(), 'can only test a child process'
  ^^^  ^^^ ^ ^ ^^  ^^  ^ ^^
^ ^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^        ^assert self._parent_pid == os.getpid(), 'can only test a child process'assert self._parent_pid == os.getpid(), 'can only test

^^  ^^^  ^ ^  ^ ^^  ^ ^ ^^^  ^ ^^  ^  ^^ ^^ ^^ ^^^^^^^^^^
```

```
Epoch 29/50 | Train: total=84.7991, recon=61.2583, kl=15.6938 | Test: total=84.6307, recon=61.0402, kl=15.7270



Epoch 30/50 | Train: total=84.8054, recon=61.2460, kl=15.7063 | Test: total=85.1453, recon=60.8574, kl=16.1919



Epoch 31/50 | Train: total=84.7605, recon=61.1841, kl=15.7176 | Test: total=84.3760, recon=61.1342, kl=15.4946


Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
```

```
          ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
```

```
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process


Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()Exception ignored in:
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Exception ignored in:
    <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Traceback (most recent call last):
if w.is_alive():

Exception ignored in: Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
     Traceback (most recent call last):
self._shutdown_workers()self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

       File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
if w.is_alive():    ^^
^  if w.is_alive():^
      ^   ^  ^  ^  ^  ^^^
 ^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^
^ ^^ ^^^ ^^^ ^^^^ ^^^ ^ ^^^ ^^^
^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

^
^assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/lib/python3.12/multiprocessing/process.py", line 16
^
^      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^     assert self._parent_pid == os.getpid(), 'can only test a child process'^ assert self._parent_pid == os.getpid(), 'can only test a
 ^^
  ^   ^    ^    ^   ^  ^   ^   ^^  ^^  ^^^ ^^^^
```

```
AssertionError: :
can only test a child processcan only test a child process

 Exception ignored in:  Exception ignored in: Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Traceback (most recent call last):

 Traceback (most recent call last):
    ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^self._shutdown_workers()  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^            ^self._shutdown_workers()^if w.is_alive():
^
self._shutdown_workers()^  ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_wo
 ^
 ^       File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     if w.is_alive():     ^assert self._parent_pid == os.getpid(), 'can only test a child process'if w.is_alive():^
^


 ^   ^ ^ ^    ^   ^  ^   ^ ^ ^^
^    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
 ^^  ^ ^^^ ^^^ ^^ ^^ ^
^ ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^    ^ assert self._parent_pid == os.getpid(), 'can only test a child process'
^ ^^^^^^ ^^^^^ ^^^
^ ^^ ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^^    ^ ^assert self._parent_pid == os.getpid(), 'can only test a child process'
^^ ^  ^^  ^ ^ ^ ^^ ^^^ ^^ ^^^ ^^ ^^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^
^^AssertionError^
^^^: ^AssertionErrorcan only test a child process^^
^: ^^can only test a child process^Exception ignored in:
^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^Traceback (most recent call last):

^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
```

```
^^        ^^self._shutdown_workers()self._shutdown_workers()^^
^^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^^    if w.is_alive():if w.is_alive():^^

^^  ^^ ^
^  AssertionError  ^:  ^ can only test a child process  ^^ ^
^^ ^
^Exception ignored in: ^^AssertionError^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^: ^
can only test a child process^^^Traceback (most recent call last):

^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^Exception ignored in:     <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>self._shutdown_workers()^
^^
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    ^    ^if w.is_alive():assert self._parent_pid == os.getpid(), 'can only test a child process'

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

self._shutdown_workers()
   assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/local/lib/python3.12/dist-packages/torch/utils/da

        if w.is_alive():
          ^^    ^^^ ^ ^ ^ ^ ^ ^ ^^^^^^^^^^^^^^^^
^^^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^^^^^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^^
^^ ^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^ ^^    ^ ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^ ^
^ ^ ^^  ^^  ^ ^ ^  ^^ ^^^   ^^ ^^ ^ ^^^ ^^^^^^^^^^^

^^^AssertionErrorAssertionError: ^: can only test a child process^^can only test a child process
^
^^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^
Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Traceback (most recent call last):
^^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^Traceback (most recent call last):
```

```
Traceback (most recent call last):
^    ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^self._shutdown_workers()^    ^
^self._shutdown_workers()  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_worker
^^^
^if w.is_alive():^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^ ^    ^ ^^ ^^ ^^if w.is_alive():^ ^
^  ^ ^ ^^^^ ^^
 ^ ^AssertionError : ^ can only test a child process^^
^^
^^AssertionError^^Exception ignored in: : ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>can only test a child pro
^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>    self._shutdown_workers()
^
Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^        if w.is_alive():^    ^self._shutdown_workers()assert self._parent_pid == os.getpid(), 'can only test a child process'

^


   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
         File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
           if w.is_alive():assert self._parent_pid == os.getpid(), 'can only test a child process'

  ^   ^   ^    ^^ ^ ^ ^  ^  ^ ^^ ^^ ^ ^^^^^^^^
^^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'
^^^^^^^ ^^ ^^^ ^^^ ^^^^^^ ^
 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^ ^assert self._parent_pid == os.getpid(), 'can only test a child process' ^^
 ^^ ^  ^^ ^ ^^^^ ^^ ^^ ^^^ ^^^ ^ ^^ ^^^^^^^^^^^^^^^^^^^^
^^^AssertionError^^^^: ^^can only test a child process^
^
^^Exception ignored in: AssertionError^^: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
can only test a child process^^
Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
```

```
Exception ignored in: ^^    <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^self._shutdown_workers()^
^^
Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^^    ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
if w.is_alive():^^
    ^^ self._shutdown_workers()^
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^
^ AssertionErrorif w.is_alive():^:
 ^can only test a child process  ^
  ^^Exception ignored in:  ^ ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^ ^
^
Traceback (most recent call last):
 ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
AssertionError^ can only test a child process: ^    ^^
self._shutdown_workers()^Exception ignored in:
^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/da
^
^^Traceback (most recent call last):
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^if w.is_alive():^
    ^^ self._shutdown_workers()^^
 ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^
if w.is_alive():assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/lib/python3.12/multiprocessing/proce


      ^ assert self._parent_pid == os.getpid(), 'can only test a child process' ^
   ^  ^ ^ ^ ^   ^  ^   ^   ^  ^^  ^
^ ^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^^     ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^
^^ ^^^^ ^^ ^^ ^^^ ^^
^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^ assert self._parent_pid == os.getpid(), 'can only test a child process'
^ ^ ^ ^  ^ ^^^^^ ^^^ ^^ ^ ^^^^^^^ ^^^ ^^ ^^^ ^^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^^^AssertionError^^^:
^^AssertionErrorcan only test a child process^: ^
can only test a child process^^
^^^^^Exception ignored in: Exception ignored in: ^^
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0><function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
```

```
Traceback (most recent call last):
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
AssertionError^self._shutdown_workers():     can only test a child process
self._shutdown_workers()  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^


^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^if w.is_alive():
^ if w.is_alive():Exception ignored in: ^
 ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
   ^ Traceback (most recent call last):
 ^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^  ^ ^
^ AssertionErrorself._shutdown_workers() :
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
can only test a child process^^    ^^
if w.is_alive():^^^
^^ Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0> ^
^ ^^
 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 Traceback (most recent call last):
^       File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^^self._shutdown_workers() ^
^^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^     ^if w.is_alive():
assert self._parent_pid == os.getpid(), 'can only test a child process' ^
  ^   ^    ^  ^
      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^     ^^ assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^^ ^^ ^  ^ ^^^ ^^^ ^^ ^^ ^^^^^ ^^
^ ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^ ^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^^^ ^^ ^^^ ^^^ ^ ^^ ^^^ ^^^^ ^ ^^^ ^^^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^^^^^: ^^^^^can only test a child process
^^
^AssertionError^: ^^can only test a child process^Exception ignored in: ^^
^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
```

```
^^Exception ignored in: Traceback (most recent call last):
^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^    ^
^self._shutdown_workers()^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^
        ^AssertionErrorif w.is_alive():self._shutdown_workers()
: ^
 ^can only test a child process  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_

^
     AssertionErrorif w.is_alive():
: Exception ignored in:   <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>can only test a child process

^Traceback (most recent call last):
 ^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>    ^ self._shutdown_workers()^

Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^       ^^if w.is_alive():self._shutdown_workers()^^

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
 ^^ ^^     ^if w.is_alive():
 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

 ^      ^ assert self._parent_pid == os.getpid(), 'can only test a child process'^
^
^  ^  ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  ^^     ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^^  ^^  ^ ^^ ^^ ^ ^^
 ^ ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^    ^
 assert self._parent_pid == os.getpid(), 'can only test a child process'^   File "/usr/lib/python3.12/multiprocessing/process.py", line

^      ^ assert self._parent_pid == os.getpid(), 'can only test a child process' ^ ^
^ ^  ^^ ^ ^ ^^ ^  ^^   ^^  ^^  ^^^ ^^^ ^^^ ^ ^^^
```

```
can only test a child process
^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^^^Traceback (most recent call last):
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^    self._shutdown_workers()^^
self._shutdown_workers()  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers


^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
AssertionError
:     if w.is_alive():if w.is_alive():AssertionErrorcan only test a child process


    :   Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>can only test a child process
   Traceback (most recent call last):

    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^     ^^^self._shutdown_workers()^Exception ignored in:
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^    ^^^if w.is_alive():^^
^
^^ Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^
    ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^ self._shutdown_workers()
    ^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    ^ ^if w.is_alive():     ^assert self._parent_pid == os.getpid(), 'can only test a child process' ^

^     ^ ^  ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
         assert self._parent_pid == os.getpid(), 'can only test a child process'
     ^^   ^^^ ^^ ^^ ^^^^^^ ^^^ ^^^ ^^^^ ^^^^ ^^^ ^^^^^^
^^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^
^^ ^^ ^^^ ^^ ^ ^^^ ^^^ ^ ^^^^ ^ ^^^ ^^^^^^^^^^^^^^^^^^^^^^
AssertionError^^: can only test a child process^
^^^Exception ignored in:
```

```
^^^Exception ignored in:
^^^AssertionError<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^:
^^Traceback (most recent call last):
can only test a child process^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^
^    ^Exception ignored in: self._shutdown_workers()^^
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^Traceback (most recent call last):
^    ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^if w.is_alive():^    ^
self._shutdown_workers()^

 ^AssertionError  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
 : ^    can only test a child process
^ if w.is_alive():
^Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0> ^
  ^Traceback (most recent call last):
^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^     ^^ ^self._shutdown_workers()^ ^
^ ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^
^^    ^AssertionErrorif w.is_alive():^^
: ^^can only test a child process^ ^

^ Exception ignored in: ^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
 ^assert self._parent_pid == os.getpid(), 'can only test a child process'^ Traceback (most recent call last):

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^ ^
 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^         assert self._parent_pid == os.getpid(), 'can only test a child process'^
 self._shutdown_workers()^^
 ^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
 ^       ^if w.is_alive(): ^^
 ^  ^
  ^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^      ^ assert self._parent_pid == os.getpid(), 'can only test a child process'
 ^^ ^ ^^^^^ ^^ ^^^ ^^ ^ ^^^ ^ ^^ ^^ ^^^ ^^^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^    ^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^ ^^ ^^^^^ ^^^^ ^ ^^^ ^^^^ ^^ ^^ ^^^^
```

```
^^ ^AssertionError^: ^^can only test a child process^^^^^
^^^^^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^
^^^Traceback (most recent call last):
^^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^AssertionError
    : ^can only test a child processself._shutdown_workers()AssertionError: ^

can only test a child process^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^Exception ignored in: ^if w.is_alive():Exception ignored in:
^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0><function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 ^
Traceback (most recent call last):
^ Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
 ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
 ^        self._shutdown_workers()^self._shutdown_workers() ^

^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^    ^if w.is_alive():^^    ^
^if w.is_alive():^ ^ ^
^ ^  ^ ^ ^ ^
  ^AssertionError ^ : ^^ can only test a child process^ ^

^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^^^    ^Exception ignored in: ^^assert self._parent_pid == os.getpid(), 'can only test a child process'<function _MultiProcessingDataL
^^^
^Traceback (most recent call last):
^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^
^self._shutdown_workers() ^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'     if w.is_alive():

 assert self._parent_pid == os.getpid(), 'can only test a child process'
        ^   ^  ^   ^  ^^ ^    ^^ ^^ ^^^ ^^^^ ^^^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^^    ^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
```

```
^^^^ ^^^^ ^^^^ ^^^ ^
^^ AssertionError^^ ^: ^^ can only test a child process
^^ ^^ ^ ^^^^
^^^AssertionError^: ^^^can only test a child process^^
^^^^^^^^
AssertionError^: ^^^^^can only test a child process^
^^^^^^^^^^^^^^
AssertionError: can only test a child process
Epoch 32/50 | Train: total=84.6169, recon=61.0534, kl=15.7090 | Test: total=84.5005, recon=61.3664, kl=15.4227



Epoch 33/50 | Train: total=84.5281, recon=60.9208, kl=15.7382 | Test: total=84.6978, recon=60.7656, kl=15.9548



Epoch 34/50 | Train: total=84.6324, recon=61.0146, kl=15.7452 | Test: total=84.9178, recon=60.9489, kl=15.9793



Epoch 35/50 | Train: total=84.4534, recon=60.8220, kl=15.7542 | Test: total=84.5047, recon=61.0256, kl=15.6527



Epoch 36/50 | Train: total=84.5075, recon=60.8414, kl=15.7774 | Test: total=84.2277, recon=60.5357, kl=15.7947



Epoch 37/50 | Train: total=84.4916, recon=60.7811, kl=15.8071 | Test: total=84.1745, recon=60.5582, kl=15.7442


Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
```

```
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^^
```

```
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
```

```
        _
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

if w.is_alive():       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
```

```
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
```

```
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()Exception ignored in:
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Exception ignored in:
if w.is_alive():<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):

   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
          self._shutdown_workers() self._shutdown_workers()

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^        ^if w.is_alive():if w.is_alive():

 ^^   ^ ^   ^ ^  ^   ^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^    ^^^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^
^ ^ ^^^
^ ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^
assert self._parent_pid == os.getpid(), 'can only test a child process'   File "/usr/lib/python3.12/multiprocessing/process.py", line 16

      assert self._parent_pid == os.getpid(), 'can only test a child process'
              ^  ^  ^ ^ ^ ^^ ^ ^^^^^^^^^^ ^^^^^^^^^^
```

```
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

 Traceback (most recent call last):
     if w.is_alive():  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^
    ^ ^self._shutdown_workers()^
^^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^     ^ ^ if w.is_alive():^
^
 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  ^^ ^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
 ^   ^  ^  ^^ ^^^ ^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^ ^ ^ ^^ ^^^ ^ ^^ ^
 ^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
     ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^ ^^ ^^^ ^^ ^^^^ ^ ^^^ ^^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^^can only test a child process^^
^^^Exception ignored in: ^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^^^Traceback (most recent call last):
^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

^    ^AssertionError: ^self._shutdown_workers()can only test a child process
^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>    ^
^if w.is_alive():Traceback (most recent call last):
^^
^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

 AssertionError     self._shutdown_workers():
 can only test a child process   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_

      Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>if w.is_alive():^

 ^Traceback (most recent call last):
 ^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^ self._shutdown_workers() ^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
 ^     if w.is_alive():^^^
 ^^^^ ^^ ^^ ^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
```

```
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
^  ^   ^
    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^  ^    assert self._parent_pid == os.getpid(), 'can only test a child process' ^
 ^  ^ ^ ^ ^^ ^^^^ ^ ^^^
 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^^ ^    ^^ assert self._parent_pid == os.getpid(), 'can only test a child process'^^^^
^^^^^^^^^^ ^ ^^  ^^^ ^^ ^ ^^  ^^^ ^^ ^^^^^^^^^^^^^^^^^
^^^AssertionError^^: ^^can only test a child process^^
^^^^^^^^^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

^AssertionErrorTraceback (most recent call last):
:   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^can only test a child process^
^self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
Exception ignored in:     ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>if w.is_alive():
^Traceback (most recent call last):

   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^     ^ self._shutdown_workers()^
^ ^ ^ ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^
^if w.is_alive():^AssertionError
^:  ^can only test a child process ^
^ ^ ^ ^ Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^^
Traceback (most recent call last):

^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^    assert self._parent_pid == os.getpid(), 'can only test a child process'^self._shutdown_workers()
^ ^
   ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^ ^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
         if w.is_alive():assert self._parent_pid == os.getpid(), 'can only test a child process'

           ^  ^ ^ ^ ^  ^   ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^
^ ^^ ^^ ^ ^ ^^ ^^ ^^^ ^^ ^^ ^^ ^^^^^^^^^
^^AssertionError^:
can only test a child processAssertionError
```

```
can only test a child processAssertionError
^: ^can only test a child process^Exception ignored in:
^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Exception ignored in: ^
^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Traceback (most recent call last):

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Traceback (most recent call last):
^    ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^self._shutdown_workers()
self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():
if w.is_alive():
 ^      ^^   ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^
^^AssertionError^: ^^can only test a child process^^^
^
Exception ignored in:   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
assert self._parent_pid == os.getpid(), 'can only test a child process'Traceback (most recent call last):

   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
     assert self._parent_pid == os.getpid(), 'can only test a child process'
self._shutdown_workers()
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        if w.is_alive():
^  ^  ^   ^ ^ ^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^    assert self._parent_pid == os.getpid(), 'can only test a child process'^^^
^ ^^^^ ^^^ ^^  ^ ^ ^^  ^^^ ^^ ^
^AssertionError^^^: ^^can only test a child process^^^^
^^^
^Exception ignored in: AssertionError^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>:
can only test a child process^Traceback (most recent call last):

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^Exception ignored in: ^self._shutdown_workers()^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
```

```
^    ^self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
if w.is_alive():^^    ^if w.is_alive():^

^  ^ ^   ^  ^ ^
  AssertionError  ^^^^: ^can only test a child process^
^^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^    ^self._shutdown_workers()
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^
if w.is_alive():^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive


assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/lib/python3.12/multiprocessing/process.py", line 160

       assert self._parent_pid == os.getpid(), 'can only test a child process'
                  ^ ^   ^ ^^ ^^^^^ ^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^ ^ ^ ^ ^^  ^ ^^^  ^^ ^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^^AssertionError^^: ^^can only test a child process^^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

AssertionError^    ^: self._shutdown_workers()can only test a child process

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    ^if w.is_alive():Exception ignored in: ^
^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^ Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
      ^ self._shutdown_workers()
^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^^if w.is_alive():^^

 AssertionError :  ^ can only test a child process
^ ^ Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^^Traceback (most recent call last):
^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
```

```
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^    assert self._parent_pid == os.getpid(), 'can only test a child process'^self._shutdown_workers()
^  ^^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
         assert self._parent_pid == os.getpid(), 'can only test a child process'
 if w.is_alive():
            ^   ^^  ^  ^^^ ^^ ^ ^^^^^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^ ^ ^^  ^^ ^ ^^ ^^ ^^ ^ ^^ ^^^^^^^^^^^^^^^^^^^^
^AssertionError^^: ^^^^can only test a child process^^
^^^
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^AssertionError^^: ^can only test a child proce

Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    Exception ignored in: self._shutdown_workers()<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
       ^if w.is_alive():self._shutdown_workers()^
^
 ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^  ^     ^if w.is_alive(): ^ ^ ^
^
 ^ AssertionError^:  ^ can only test a child process
^^^  ^ Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^
^^Traceback (most recent call last):
^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^    assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^
 if w.is_alive():
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
         assert self._parent_pid == os.getpid(), 'can only test a child process'
      ^  ^  ^  ^^ ^ ^^ ^^^ ^ ^^^ ^ ^^^^^^^
^^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
```

```
    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^ ^^ ^^^ ^^ ^ ^  ^ ^^ ^^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^^: ^^^^^
can only test a child process^^
^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>AssertionError^
: ^Traceback (most recent call last):
can only test a child process^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

^    ^Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>self._shutdown_workers()^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

^    Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    if w.is_alive():
self._shutdown_workers()
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
 ^^
if w.is_alive(): AssertionError
    :   can only test a child process
 ^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^    ^^^self._shutdown_workers()^
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^^^^^    ^^^if w.is_alive():


  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
          assert self._parent_pid == os.getpid(), 'can only test a child process' assert self._parent_pid == os.getpid(), 'can only test

         ^  ^ ^  ^  ^ ^  ^ ^ ^^^^ ^  ^^
 ^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^    ^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^^^^ ^    ^^ ^^ ^ ^ ^^^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^: ^^can only test a child process^^
^^^^Exception ignored in: ^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^^

Traceback (most recent call last):
^AssertionError  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^: can only test a child process    ^
self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    Exception ignored in: if w.is_alive():^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^
^ Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
   ^    ^
self._shutdown_workers()
AssertionError  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
:      can only test a child process^if w.is_alive():
^
^ ^Exception ignored in:  ^ <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
^Traceback (most recent call last):
    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^ ^^    ^^^^self._shutdown_workers()^^^
^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^    assert self._parent_pid == os.getpid(), 'can only test a child process'if w.is_alive():^
^
  ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
         assert self._parent_pid == os.getpid(), 'can only test a child process'
    ^^ ^ ^^^ ^^ ^^^^^^^^ ^^ ^ ^ ^^^^^
^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^     ^^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^  ^^ ^^^ ^ ^ ^^ ^^ ^^ ^^^^^ ^^^^ ^^^^^^^^^^^
^^AssertionError^^^: ^^can only test a child process^^
^^^^^^^^^^^^^^^
AssertionError: ^can only test a child process^
^^^^^^^^^^^^
AssertionError: can only test a child process
Epoch 38/50 | Train: total=84.3999, recon=60.6801, kl=15.8132 | Test: total=86.7269, recon=62.5515, kl=16.1169




Epoch 39/50 | Train: total=84.4313, recon=60.6751, kl=15.8375 | Test: total=84.1349, recon=60.6188, kl=15.6774




Epoch 40/50 | Train: total=84.3263, recon=60.5418, kl=15.8563 | Test: total=84.1348, recon=60.3365, kl=15.8655
```

```
Epoch 41/50 | Train: total=84.2441, recon=60.4873, kl=15.8379 | Test: total=84.4473, recon=60.5993, kl=15.8987



Epoch 42/50 | Train: total=84.1881, recon=60.4372, kl=15.8340 | Test: total=84.0703, recon=60.6374, kl=15.6219



Epoch 43/50 | Train: total=84.2423, recon=60.4055, kl=15.8912 | Test: total=84.3648, recon=60.6230, kl=15.8278


Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
```

```
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
```

```
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
```

```
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
```

```
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process


Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
Exception ignored in:  Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0><function _MultiProcessi

 Traceback (most recent call last):
Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
           ^self._shutdown_workers()self._shutdown_workers()^

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^        ^if w.is_alive():if w.is_alive():^

 ^ ^  ^  ^ ^
    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  ^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
```

```
        assert self._parent_pid == os.getpid(), 'can only test a child process'
^^ ^ ^^^^ ^^^^^^ ^   ^ ^^ ^
^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^
    ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^assert self._parent_pid == os.getpid(), 'can only test a child process'    ^
assert self._parent_pid == os.getpid(), 'can only test a child process'
^  ^  ^  ^  ^  ^ ^^  ^  ^ ^  ^  ^^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^^^: ^can only test a child process^
^^^^^^Exception ignored in: ^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
^^^^Traceback (most recent call last):
^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^
^    AssertionError^self._shutdown_workers(): ^^
can only test a child process
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

AssertionError    if w.is_alive()::
Exception ignored in: can only test a child process
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
 Exception ignored in:      <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
self._shutdown_workers()^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__

^    ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^self._shutdown_workers()
^if w.is_alive():  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^
     ^if w.is_alive():^
 ^  ^  ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      ^^^assert self._parent_pid == os.getpid(), 'can only test a child process'
^^ ^^ ^^ ^^ ^^^^^ ^^^ ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      ^assert self._parent_pid == os.getpid(), 'can only test a child process' ^^^
^
^   ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^ assert self._parent_pid == os.getpid(), 'can only test a child process'
  ^  ^^  ^  ^ ^  ^ ^   ^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^^AssertionError^^: ^can only test a child process^^
^^^^Exception ignored in: ^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
```

```
^^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^    self._shutdown_workers()^^^^

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
AssertionError^    ^: if w.is_alive():can only test a child process


AssertionError: Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>can only test a child process

 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
 Exception ignored in:     <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0> self._shutdown_workers()

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^Traceback (most recent call last):
^      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^if w.is_alive():    ^self._shutdown_workers()
^
 ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
 ^^     ^if w.is_alive():
^  ^
 ^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^      assert self._parent_pid == os.getpid(), 'can only test a child process'^ ^
 ^ ^^ ^^ ^ ^^ ^^ ^^^ ^
 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^    ^ assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^^^ ^
 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^    ^ assert self._parent_pid == os.getpid(), 'can only test a child process'
  ^ ^  ^^  ^  ^^ ^^ ^^ ^^ ^^ ^^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^^AssertionError^: ^^^can only test a child process^^^
^^^^^^^Exception ignored in:
^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>AssertionError^
Traceback (most recent call last):
: ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
can only test a child process    ^
self._shutdown_workers()^

  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
AssertionErrorException ignored in:     : can only test a child process<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec
```

```
  Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Exception ignored in:  <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
 Traceback (most recent call last):
       File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
 self._shutdown_workers()    ^
self._shutdown_workers()^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^    ^if w.is_alive():^
^if w.is_alive(): ^
 ^ ^  ^   ^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^     ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^^^ ^^ ^ ^^^ ^ ^ ^^ ^ ^ ^
 ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^

^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^      ^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^   ^ ^ ^  ^  ^  ^ ^ ^ ^ ^^ ^ ^^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^^AssertionError^: can only test a child process^
^^^Exception ignored in: ^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^^^
^^Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^    ^^^self._shutdown_workers()^^^
^^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^
    ^AssertionError: if w.is_alive():can only test a child process

^ Exception ignored in: ^
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0> AssertionError :  can only test a child process

 Traceback (most recent call last):
Exception ignored in:   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
     <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^
self._shutdown_workers()
^Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    ^if w.is_alive():    ^self._shutdown_workers()
^
 ^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
^  ^    ^ if w.is_alive(): ^
^  ^
^ ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^     ^ ^ assert self._parent_pid == os.getpid(), 'can only test a child process'^ ^^
^^^^^^^^ ^^^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^ ^    assert self._parent_pid == os.getpid(), 'can only test a child process' ^
 ^  ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'
^ ^   ^ ^ ^  ^ ^ ^ ^ ^  ^^ ^^ ^^ ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
^AssertionError^^^: ^^can only test a child process^^
^^^^^^^^Exception ignored in: ^^^<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>^^
^Traceback (most recent call last):
^^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^^^    ^^self._shutdown_workers()^^
^
AssertionError^:   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

can only test a child processAssertionError
if w.is_alive()::
can only test a child process
 Exception ignored in:   <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>Exception ignored in:
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0> Traceback (most recent call last):

   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Traceback (most recent call last):
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^    ^    self._shutdown_workers()^
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
self._shutdown_workers()^    if w.is_alive():^
^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

^     ^ if w.is_alive():^
 ^  ^
    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
      ^ assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^ ^^ ^ ^^^ ^^ ^^ ^^ ^^ ^^ ^^^
^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

^      File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^assert self._parent_pid == os.getpid(), 'can only test a child process'    ^assert self._parent_pid == os.getpid(), 'can only test a ch
```

```
^ ^  ^^  ^^^  ^    ^  ^   ^   ^ ^^ ^^ ^^^
```

```
    AssertionErrorException ignored in: : if w.is_alive():<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>can only te


 Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Exception ignored in:     <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0> self._shutdown_workers()

Traceback (most recent call last):
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
         ^self._shutdown_workers()^if w.is_alive():

^  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
 ^    ^ if w.is_alive():^ ^^
  ^  ^ ^  ^^
 ^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^     ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^ ^^^^ ^ ^^^ ^^ ^^^ ^^
^ ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

       File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
assert self._parent_pid == os.getpid(), 'can only test a child process'
^assert self._parent_pid == os.getpid(), 'can only test a child process'
 ^  ^ ^   ^  ^ ^  ^  ^  ^  ^ ^ ^^ ^^^^
```

```
 self._shutdown_workers()  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_worker

        File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
if w.is_alive():
      if w.is_alive():
 ^   ^  ^  ^  ^^ ^^ ^^^^^^^^^^^^^^^^^^^^
^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^        ^assert self._parent_pid == os.getpid(), 'can only test a child process'assert self._parent_pid == os.getpid(), 'can only test
^


   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'
                 ^ ^^ ^^ ^^ ^ ^^ ^^^^^^^^^^^^^^^^^^^
```

```
    assert self._parent_pid == os.getpid(), 'can only test a child process'    assert self._parent_pid == os.getpid(), 'can only test a ch
^
  ^ ^ ^
    File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'
         ^  ^ ^   ^ ^^  ^^^ ^^^
```

```
        ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
Traceback (most recent call last):
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
        ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
        ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
        ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
```

```
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process
Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    self._shutdown_workers()
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
    if w.is_alive():
       ^^^^^^^^^^^^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
    assert self._parent_pid == os.getpid(), 'can only test a child process'
           ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
AssertionError: can only test a child process


Exception ignored in: Exception ignored in: Exception ignored in: <function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0><fu


Traceback (most recent call last):
Traceback (most recent call last):
Traceback (most recent call last):
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
            self._shutdown_workers()self._shutdown_workers()self._shutdown_workers()Exception ignored in:


  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
<function _MultiProcessingDataLoaderIter.__del__ at 0x7e3eb55d7ec0>  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/data

    Traceback (most recent call last):
if w.is_alive():
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
if w.is_alive():
if w.is_alive():self._shutdown_workers()

    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
```

```
    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
                ^ if w.is_alive():  ^
^^ ^  ^^^^ ^ ^^^^ ^^^ ^^^ ^^^^^^^^^^^^^^^^
^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        ^assert self._parent_pid == os.getpid(), 'can only test a child process'    ^assert self._parent_pid == os.getpid(), 'can only t
^
  ^
  ^
     File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
        assert self._parent_pid == os.getpid(), 'can only test a child process'
                    ^   ^  ^^^ ^^ ^^^ ^^^^^^^^^^^^^^^^
```

```
    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
          if w.is_alive():
      ^^    ^    ^^^^^^^ ^^ ^^^^^^^^^^^^^^^^^
^^^^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^
^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  ^         ^assert self._parent_pid == os.getpid(), 'can only test a child process'^ assert self._parent_pid == os.getpid(), 'can only

  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

        assert self._parent_pid == os.getpid(), 'can only test a child process'
        ^     ^   ^  ^     ^  ^    ^ ^^^^^^^^^^^^^^^^^
```

```
     if w.is_alive():if w.is_alive():  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shu
^

^      ^  ^ if w.is_alive():
^   ^       ^^  ^^ ^^^^^^ ^^^^^^^
^^^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^^    ^^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^^^

^^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^^
assert self._parent_pid == os.getpid(), 'can only test a child process'   File "/usr/lib/python3.12/multiprocessing/process.py", line 16

^      ^^assert self._parent_pid == os.getpid(), 'can only test a child process'
 ^
     File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
            assert self._parent_pid == os.getpid(), 'can only test a child process'
^  ^ ^   ^   ^  ^^ ^^ ^^  ^^  ^ ^^ ^^^ ^^^^ ^^^^^^^
```

```
          if w.is_alive(): self._shutdown_workers()

     File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
         ^if w.is_alive():^
^     ^^  ^^^^ ^^^^ ^^^ ^^ ^^^^^^^^^^^^^^^^^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^        assert self._parent_pid == os.getpid(), 'can only test a child process'^^assert self._parent_pid == os.getpid(), 'can only tes
^


   ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^      ^
  assert self._parent_pid == os.getpid(), 'can only test a child process'  File "/usr/lib/python3.12/multiprocessing/process.py", line 1

      assert self._parent_pid == os.getpid(), 'can only test a child process'
               ^  ^  ^^   ^^ ^ ^  ^^^  ^  ^^^^^^^^^^^^^^^^^^
```

```
    File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
^   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
     ^ self._shutdown_workers()     ^
^if w.is_alive():   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^^     ^^
if w.is_alive():^^ ^
^  ^^  ^^  ^ ^
^  ^   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^     ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^^^^ ^
^ ^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^    ^^ ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^^ ^  ^ ^ ^ ^ ^ ^


  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
         File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 assert self._parent_pid == os.getpid(), 'can only test a child process'
   ^       ^^ assert self._parent_pid == os.getpid(), 'can only test a child process'^^
 ^^  ^^  ^ ^ ^ ^ ^^ ^ ^  ^^^ ^^^^ ^^^ ^^ ^^^ ^^^^
```

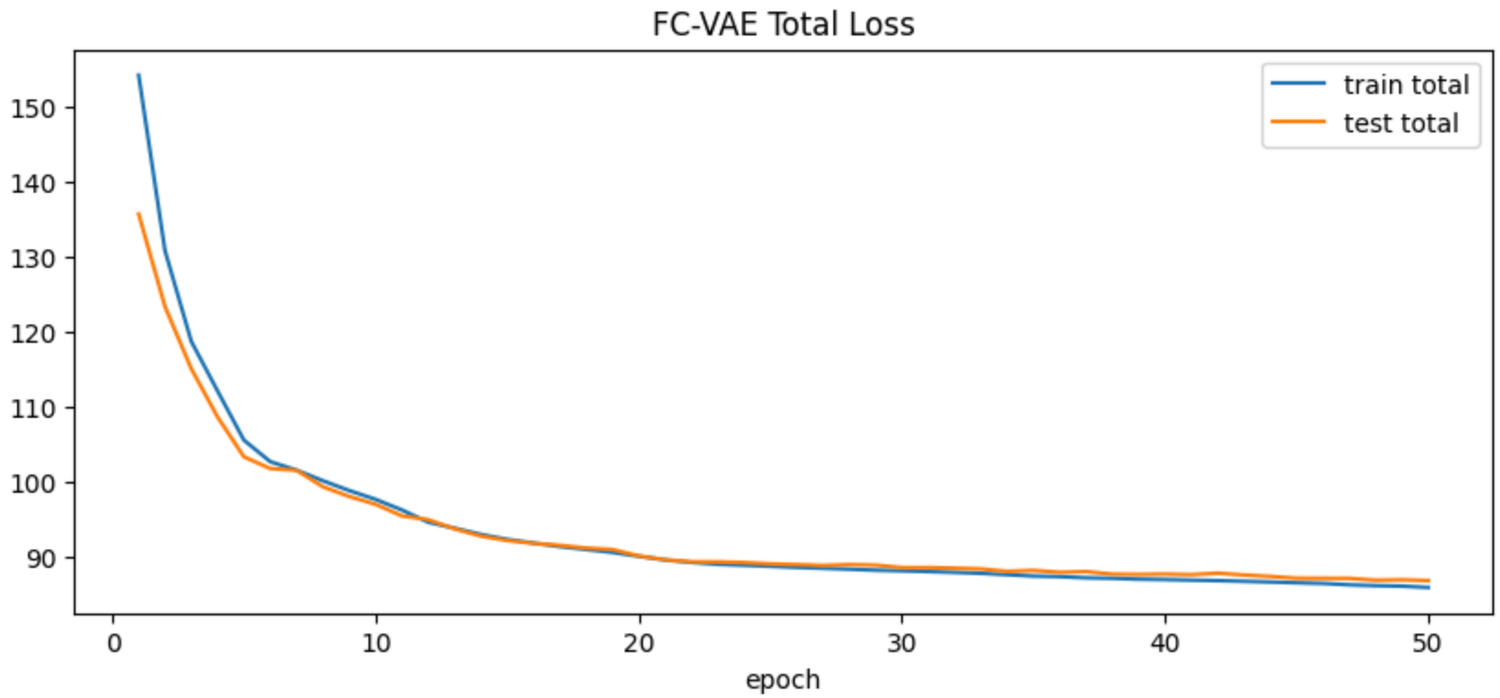
```
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
Traceback (most recent call last):
        File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
    if w.is_alive():
if w.is_alive():  self._shutdown_workers()

   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
 ^     ^ if w.is_alive():  ^
  ^    ^  ^   ^ ^  ^^^^^ ^^^^^^^^^^^^^^^^^^
^^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^^    ^^^^assert self._parent_pid == os.getpid(), 'can only test a child process'^
^
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^     ^assert self._parent_pid == os.getpid(), 'can only test a child process'

^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

       File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
assert self._parent_pid == os.getpid(), 'can only test a child process'       assert self._parent_pid == os.getpid(), 'can only test a c

                ^  ^  ^ ^  ^   ^^  ^^  ^ ^ ^^^ ^^^^^^^^^^^^^^^^^^
```

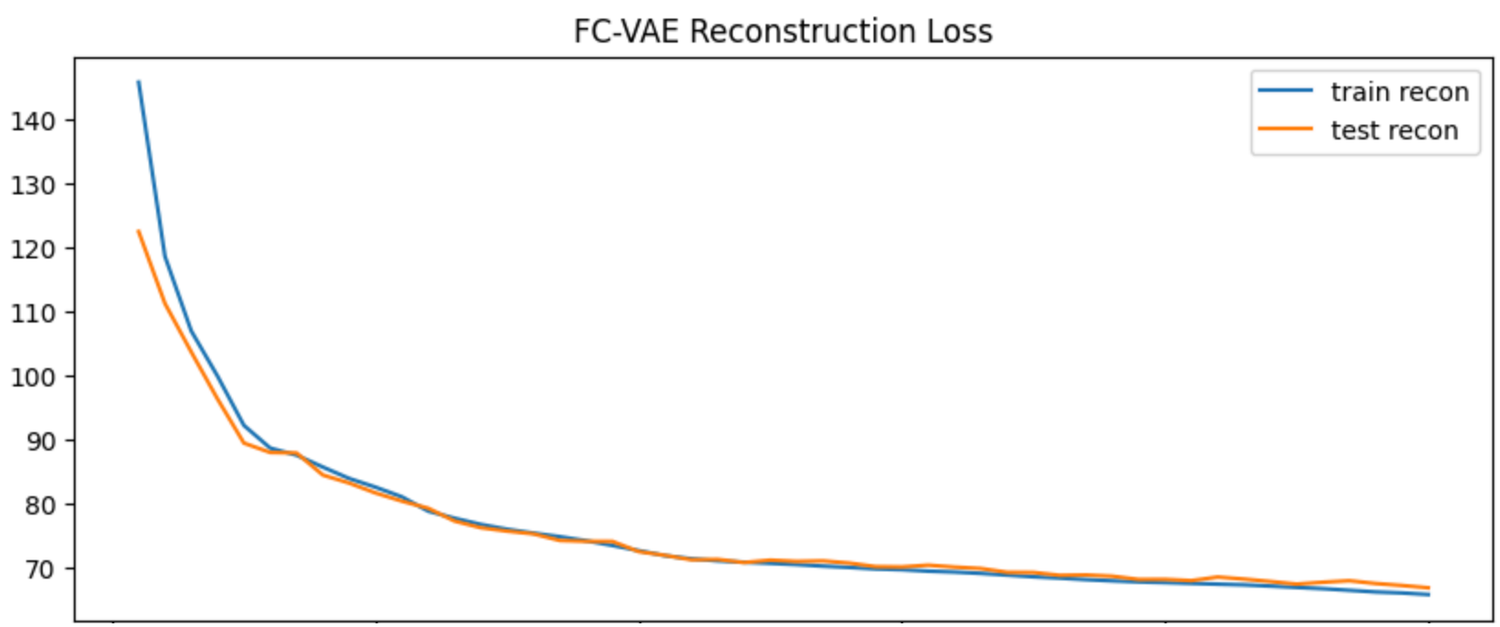
```
      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
self._shutdown_workers() self._shutdown_workers()

if w.is_alive():
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
        ^if w.is_alive():     ^ ^if w.is_alive():
^  ^
^  ^   ^^ ^ ^ ^ ^  ^^ ^^ ^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^^^^^^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^
^^^ ^^^^  ^^^
^^ ^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^ ^
   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
assert self._parent_pid == os.getpid(), 'can only test a child process'
  ^ assert self._parent_pid == os.getpid(), 'can only test a child process'

   File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  ^      ^  assert self._parent_pid == os.getpid(), 'can only test a child process'  ^
  ^      ^  ^    ^  ^^  ^^ ^^^^ ^^^^^ ^^ ^^^ ^^^^^^^^
```

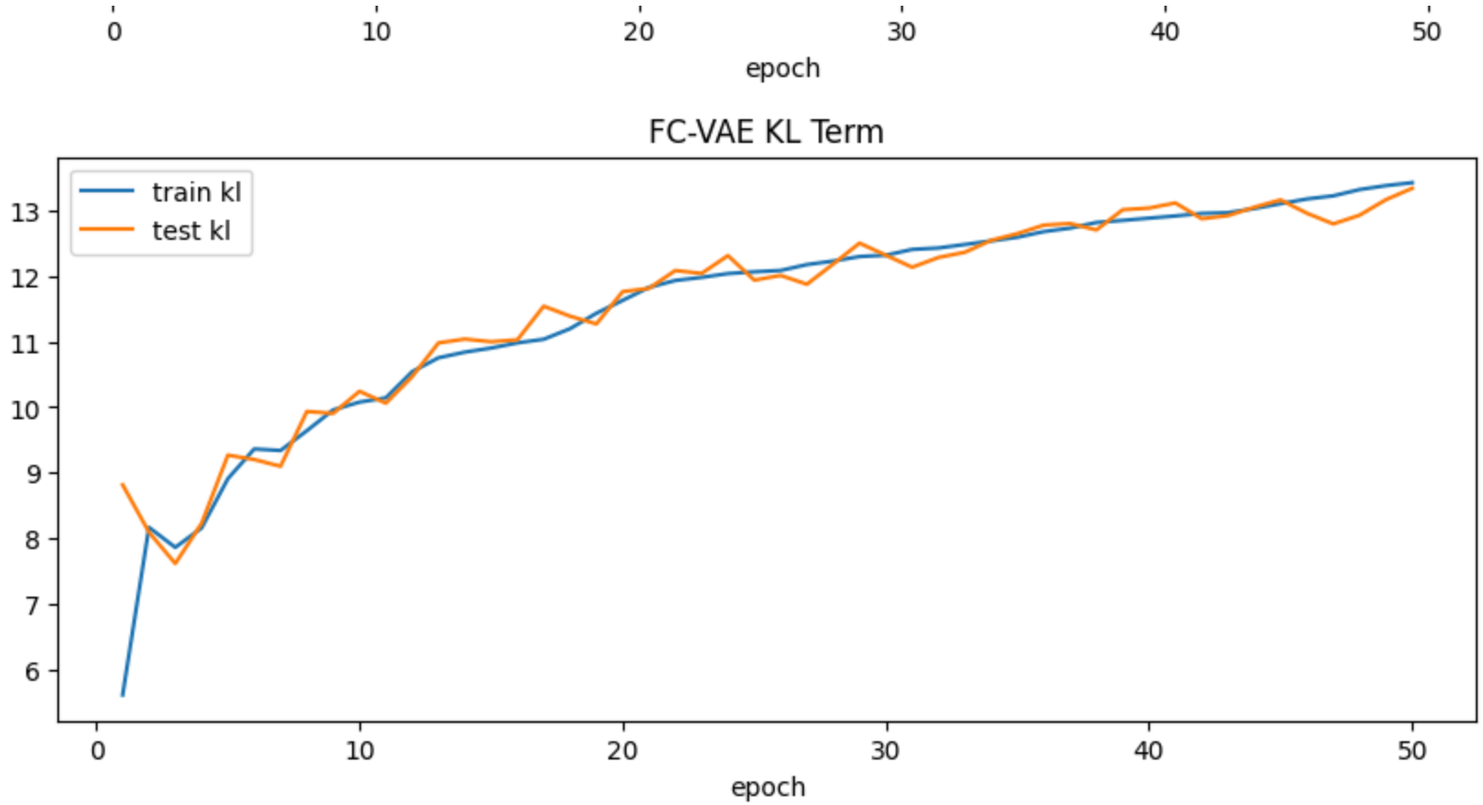
```
   File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
 self._shutdown_workers()self._shutdown_workers()

       File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
^self._shutdown_workers()
if w.is_alive():^      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers

^^if w.is_alive(): ^
    ^if w.is_alive():
 ^ ^   ^   ^  ^   ^
     File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
 ^ ^    ^^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^^
^^ ^^^^ ^^^ ^^^ ^^ ^^ ^^ ^^^^^^ ^^
^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive

     assert self._parent_pid == os.getpid(), 'can only test a child process'   File "/usr/lib/python3.12/multiprocessing/process.py", li
assert self._parent_pid == os.getpid(), 'can only test a child process'^
^assert self._parent_pid == os.getpid(), 'can only test a child process'^

^   ^     ^  ^   ^  ^   ^   ^     ^   ^^ ^ ^^^ ^^^^^^
```

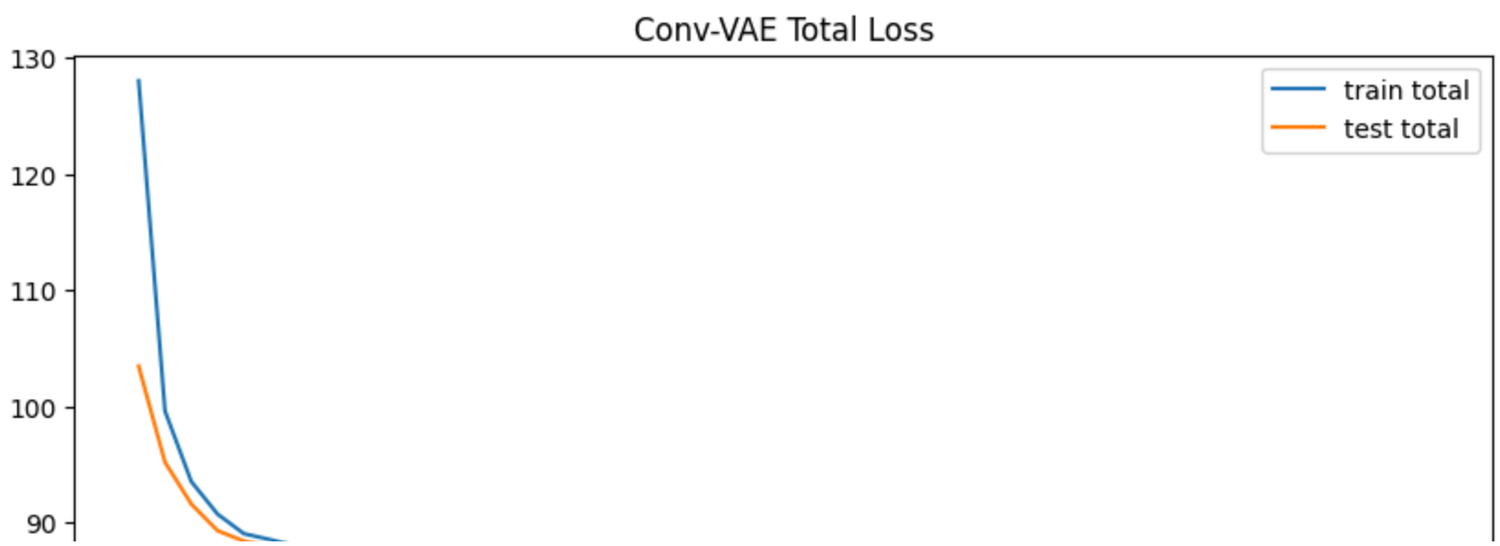
```
  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
 self._shutdown_workers()Traceback (most recent call last):

      File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1654, in __del__
self._shutdown_workers()       File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_wo
 self._shutdown_workers()
     if w.is_alive():  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers


  File "/usr/local/lib/python3.12/dist-packages/torch/utils/data/dataloader.py", line 1637, in _shutdown_workers
 ^     if w.is_alive():^     ^
 if w.is_alive(): ^
^   ^   ^ ^ ^^^  ^ ^ ^^ ^^^^
^^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^    ^assert self._parent_pid == os.getpid(), 'can only test a child process'^^^
^^^^ ^^^
^^  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
^^      ^^assert self._parent_pid == os.getpid(), 'can only test a child process'
 ^^  ^^  ^^  ^


  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
  File "/usr/lib/python3.12/multiprocessing/process.py", line 160, in is_alive
          ^ assert self._parent_pid == os.getpid(), 'can only test a child process' assert self._parent_pid == os.getpid(), 'can only te

^  ^  ^ ^  ^ ^ ^  ^^ ^ ^  ^^^  ^ ^ ^  ^^ ^^ ^^^^^ ^^^ ^^^^^
```

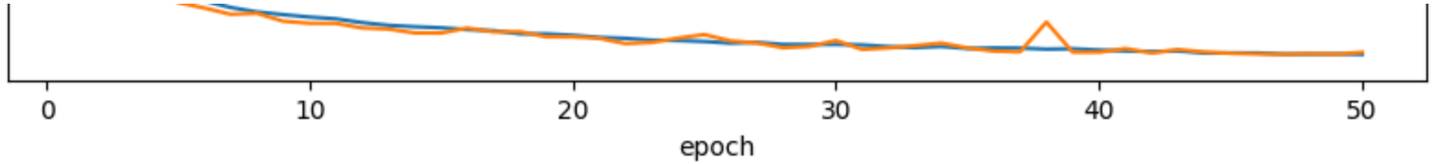
```python
### Cell 1.8 — Plot Loss Curves (Optional but Nice)
def plot_history(hist, title_prefix=""):
    xs = np.arange(1, len(hist["train_total"]) + 1)

    plt.figure(figsize=(10,4))
    plt.plot(xs, hist["train_total"], label="train total")
    plt.plot(xs, hist["test_total"], label="test total")
    plt.title(f"{title_prefix} Total Loss")
    plt.xlabel("epoch")
    plt.legend()
    plt.show()

    plt.figure(figsize=(10,4))
    plt.plot(xs, hist["train_recon"], label="train recon")
    plt.plot(xs, hist["test_recon"], label="test recon")
    plt.title(f"{title_prefix} Reconstruction Loss")
    plt.xlabel("epoch")
    plt.legend()
    plt.show()

    plt.figure(figsize=(10,4))
    plt.plot(xs, hist["train_kl"], label="train kl")
    plt.plot(xs, hist["test_kl"], label="test kl")
    plt.title(f"{title_prefix} KL Term")
    plt.xlabel("epoch")
    plt.legend()
    plt.show()

plot_history(hist_fc, "FC-VAE")
plot_history(hist_conv, "Conv-VAE")
```

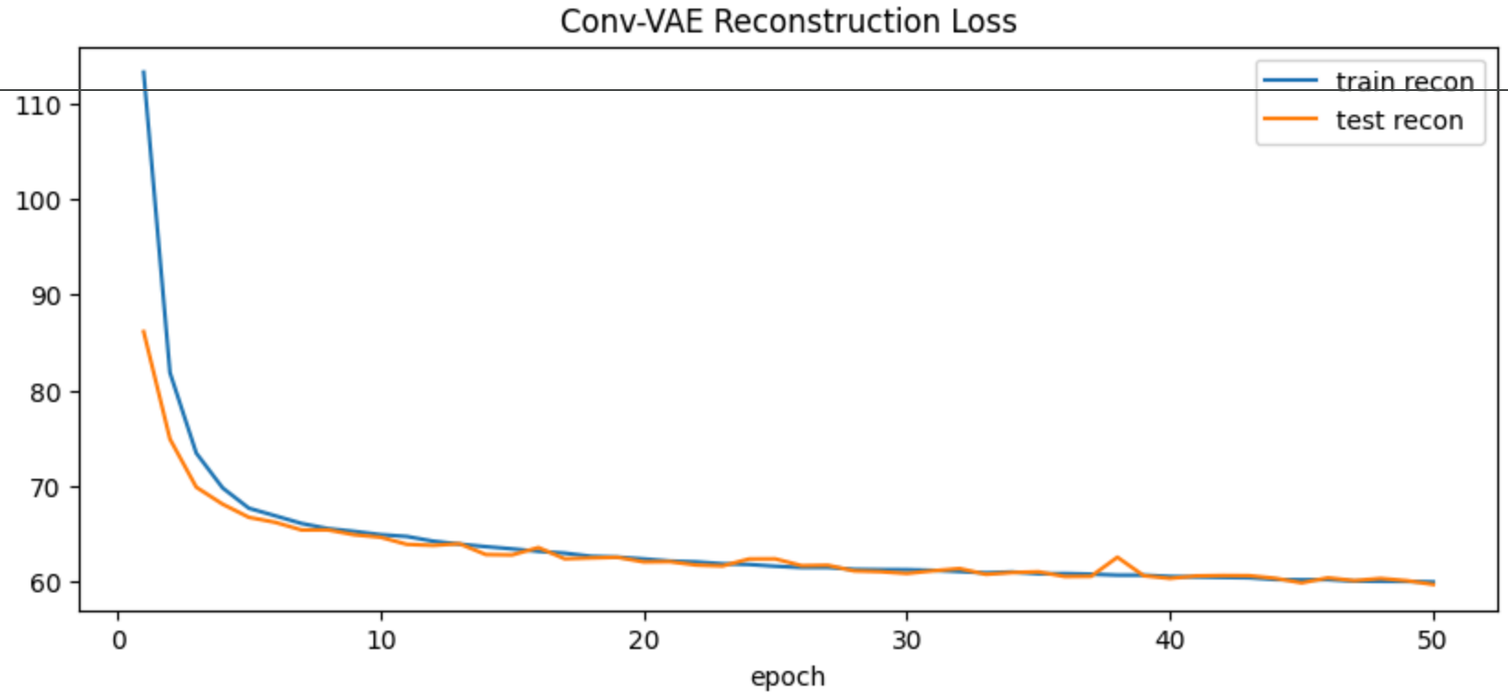

FC-VAE Total Loss
train total
test total
150
140
130
120
110
100
90
0
10
20
30
40
50
epoch

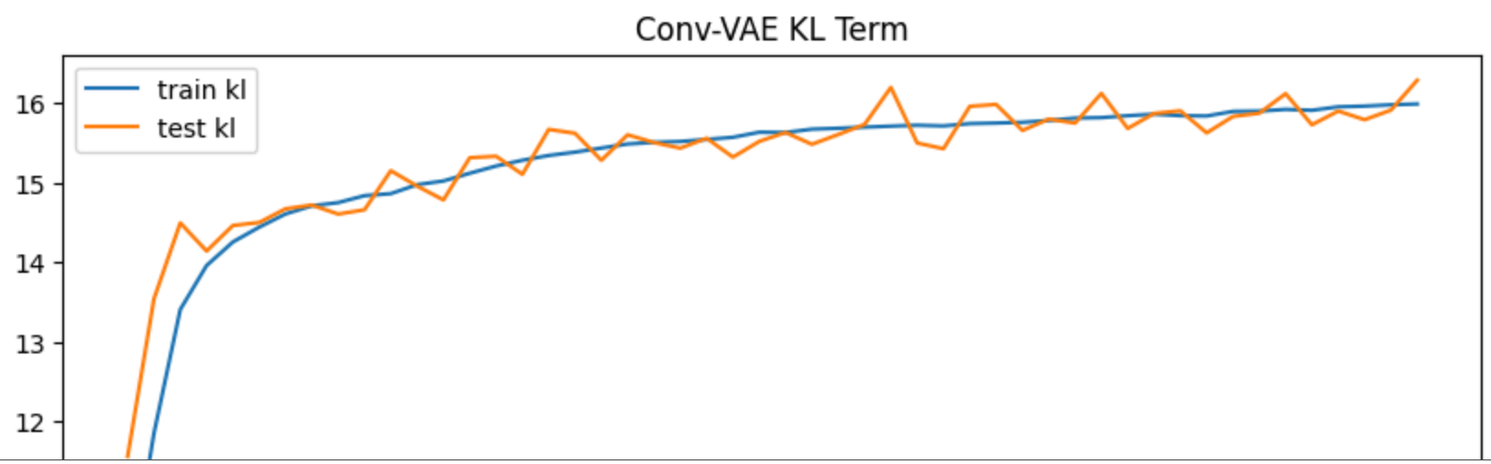

FC-VAE Reconstruction Loss
train recon
test recon
140
130
120
110
100
90
80
70


0
10
20
30
40
50
epoch
FC-VAE KL Term
train kl
test kl
13
12
11
10
9
8
7
6
0
10
20
30
40
50
epoch

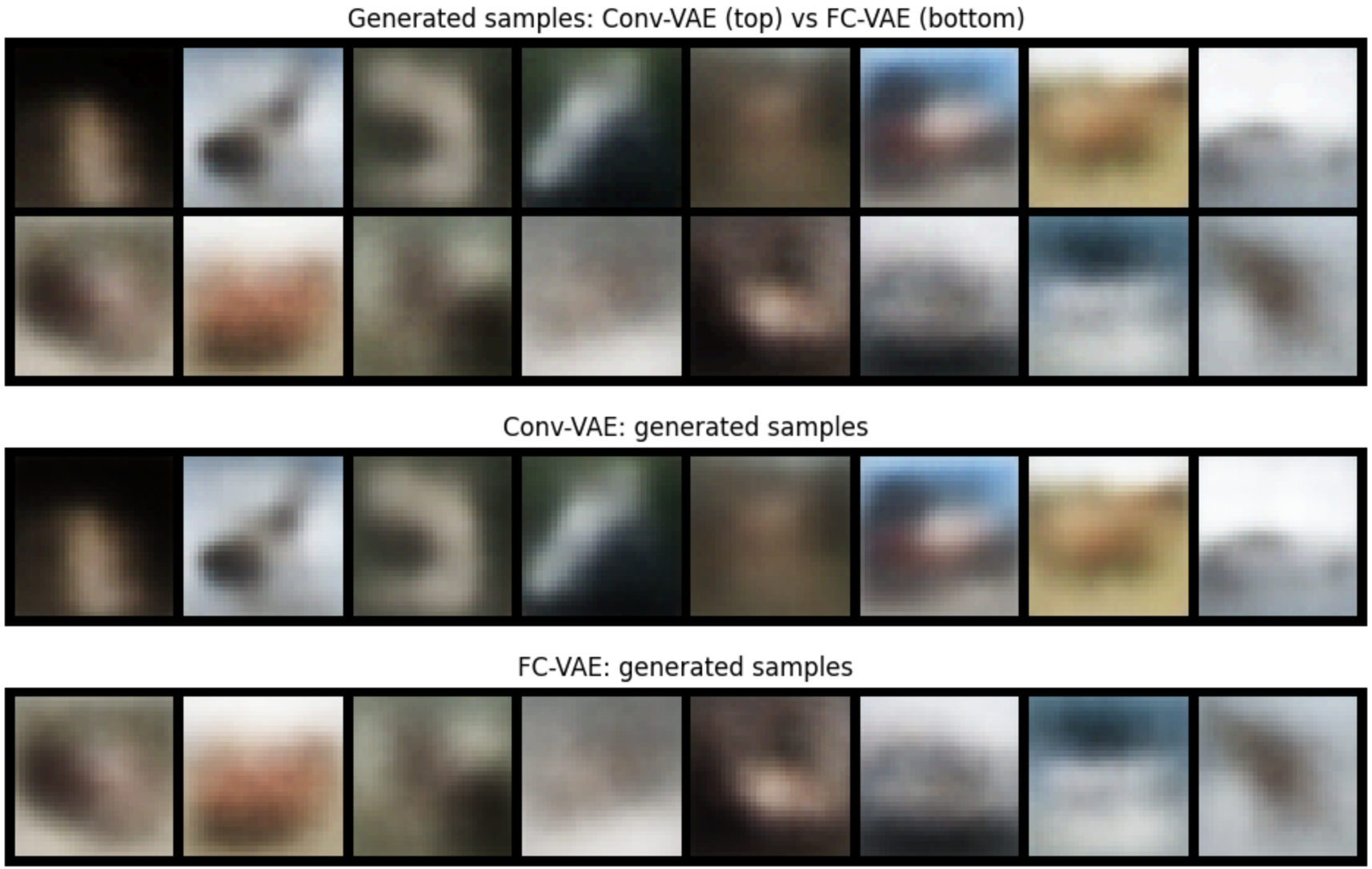

Conv-VAE Total Loss
train total
test total
130
120
110
100
90


0
10
20
30
40
50
epoch


Conv-VAE Reconstruction Loss
train recon
test recon
110
100
90
80
70
60
0
10
20
30
40
50
epoch


Conv-VAE KL Term
train kl
test kl
16
15
14
13
12

```
#### Cell 1.9 — Compare Generated
n = 8  # show 8 samples per model row

samples_conv = sample_images(conv_vae.to(device), LATENT_DIM, n=n)
samples_fc   = sample_images(fc_vae.to(device),   LATENT_DIM, n=n)

# 2 rows: top=ConvVAE, bottom=FCVAE
combined = torch.cat([samples_conv, samples_fc], dim=0)
show_grid(combined, title="Generated samples: Conv-VAE (top) vs FC-VAE (bottom)", nrow=n, figsize=(12,4))

show_grid(samples_conv, title="Conv-VAE: generated samples", nrow=n, figsize=(12,2.5))
show_grid(samples_fc,   title="FC-VAE: generated samples",   nrow=n, figsize=(12,2.5))

```




```
##### Cell 1.10 — Compare Reconstructions
x, _ = next(iter(test_loader))
x = x[:8].to(device)

recon_conv = reconstruct_images(conv_vae.to(device), x)
```

```
recon_fc   = reconstruct_images(fc_vae.to(device),   x)

# 3 rows: original, conv recon, fc recon
triplet = torch.cat([x, recon_conv, recon_fc], dim=0)
show_grid(triplet, title="Reconstructions: original (top), Conv-VAE (middle), FC-VAE (bottom)", nrow=8, figsize=(12,5))

```

Results interpresation

After implementing a convolutional encoder/decoder to replace the fully connected Variational Autoencoder (VAE) and training both models on the CIFAR-10 dataset, we found promising results that reinforce the idea that convolutional layers can effectively capture spatial relationships, thereby enhancing image quality. The Convolutional VAE (Conv-VAE) demonstrated a significantly lower reconstruction loss—and overall loss—compared to the Fully Connected VAE (FC-VAE),

> while both models maintained closely aligned training and testing curves. This indicates that the learning process was stable and showed no clear signs of overfitting.

> Visually, the improvements were apparent in the reconstruction comparisons: the Conv-VAE was better at preserving the coarse structure of objects, edges, and spatial layouts, whereas the FC-VAE reconstructions tended to be more washed out and less coherent. This is understandable, as flattening images early in the network can lead to a loss of locality.

> Although both models produced somewhat blurry samples after 10 epochs—something commonly observed with VAEs using pixel-wise reconstruction objectives—the Conv-VAE samples exhibited a more structured and varied appearance. This suggests that convolutional feature hierarchies offer a stronger inductive bias for modeling images, which is likely to lead to higher-quality generations compared to a purely fully connected architecture. Overall, these findings highlight the advantages of convolutional layers in image processing tasks and suggest avenues for further exploration and improvement in VAE design.

Task2

> Using the trained VAE, interpolate between two images in the latent space and generate intermediate images. This demonstrates how smoothly the model can transition between different data points. Visualize and display the results, showing the interpolated images in a grid format to observe the transformation.

References / Citations

rishabkr. (n.d.). AutoEncoders [GitHub repository]. GitHub. Retrieved January 31, 2026, from https://github.com/rishabkr/AutoEncoders

evgiz. (n.d.). variational-autoencoder [GitHub repository]. GitHub. Retrieved January 31, 2026, from https://github.com/evgiz/variational-autoencoder

Double-click (or enter) to edit

```
### Cell 2.1 Helpers (pick endpoints, lerp/slerp, interpolate + visualize)
import torch
```

```python
import numpy as np
from torchvision.utils import make_grid
import matplotlib.pyplot as plt

# CIFAR-10 label names (optional, for nicer titles)
CIFAR10_CLASSES = [
    "airplane","automobile","bird","cat","deer",
    "dog","frog","horse","ship","truck"
]

def show_grid(images, title="", nrow=8, figsize=(12, 3)):
    """images: Tensor (B,3,32,32) in [0,1]"""
    grid = make_grid(images.cpu(), nrow=nrow, padding=2)
    plt.figure(figsize=figsize)
    plt.imshow(grid.permute(1,2,0))
    plt.axis("off")
    plt.title(title)
    plt.show()

def pick_two_images_different_classes(dataset, seed=42):
    """Pick two random images from dataset with different class labels."""
    rng = np.random.default_rng(seed)
    idx1 = int(rng.integers(0, len(dataset)))
    x1, y1 = dataset[idx1]
    idx2 = idx1
    while idx2 == idx1:
        idx2 = int(rng.integers(0, len(dataset)))
        x2, y2 = dataset[idx2]
        if y2 != y1:
            break
    return (x1, y1, idx1), (x2, y2, idx2)

def lerp(z1, z2, t):
    """Linear interpolation: (1-t)z1 + t z2"""
    return (1 - t) * z1 + t * z2

def slerp(z1, z2, t, eps=1e-7):
    """
    Spherical linear interpolation.
```

```
    Often gives smoother transitions for latent vectors on/near a hypersphere.
    """
    # Normalize
    z1n = z1 / (z1.norm(dim=1, keepdim=True) + eps)
    z2n = z2 / (z2.norm(dim=1, keepdim=True) + eps)

    dot = (z1n * z2n).sum(dim=1, keepdim=True).clamp(-1.0, 1.0)
    omega = torch.acos(dot)               # angle
    sin_omega = torch.sin(omega).clamp_min(eps)

    # If vectors are too close, fallback to lerp
    close = (omega < 1e-3).float()
    part1 = torch.sin((1 - t) * omega) / sin_omega
    part2 = torch.sin(t * omega) / sin_omega
    z = part1 * z1 + part2 * z2
    z_l = lerp(z1, z2, t)

    return close * z_l + (1 - close) * z

@torch.no_grad()
def interpolate_latent(model, x1, x2, steps=10, method="lerp", use_mu=True, device="cuda"):
    """
    model: trained VAE with .encode() and .decode()
    x1, x2: Tensors (3,32,32) in [0,1]
    steps: number of frames INCLUDING endpoints
    method: "lerp" or "slerp"
    use_mu: if True, use encoder mean as latent (deterministic, smoother);
            if False, sample using reparameterization (more stochastic)
    """
    model.eval()
    x = torch.stack([x1, x2]).to(device)

    mu, logvar = model.encode(x)

    if use_mu:
        z1, z2 = mu[0:1], mu[1:2]
    else:
        if hasattr(model, "reparameterize"):
            z = model.reparameterize(mu, logvar)
```

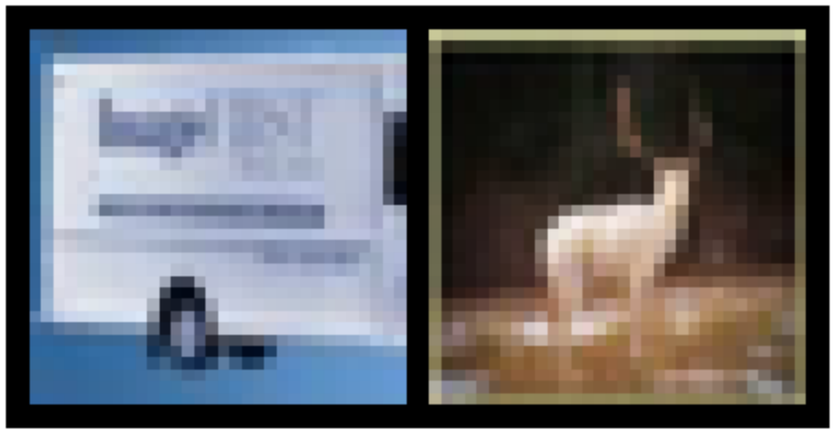
```
        else:
            std = torch.exp(0.5 * logvar)
            z = mu + torch.randn_like(std) * std
        z1, z2 = z[0:1], z[1:2]

    ts = torch.linspace(0, 1, steps, device=device).view(-1, 1)  # (steps,1)

    if method.lower() == "slerp":
        zs = torch.cat([slerp(z1, z2, t=ts[i:i+1]) for i in range(steps)], dim=0)
    else:
        zs = lerp(z1, z2, ts)

    imgs = model.decode(zs).clamp(0, 1)  # (steps,3,32,32)
    return imgs

```

```
#### Cell 2.2 Run interpolation using your trained model (Conv-VAE)
# Choose which trained VAE to use:
model_to_use = conv_vae  # <-- recommended for Task 2 (better spatial smoothness)


# Pick two CIFAR-10 images with different labels
(a_img, a_lbl, a_idx), (b_img, b_lbl, b_idx) = pick_two_images_different_classes(test_ds, seed=7)

print(f"Endpoint A: idx={a_idx}, class={CIFAR10_CLASSES[a_lbl]} ({a_lbl})")
print(f"Endpoint B: idx={b_idx}, class={CIFAR10_CLASSES[b_lbl]} ({b_lbl})")

# Show the original endpoints
show_grid(torch.stack([a_img, b_img]), title="Original endpoint images (from CIFAR-10)", nrow=2, figsize=(6,3))

# Interpolate in latent space and decode
STEPS = 12  # number of images in the interpolation grid (includes endpoints)
interp_imgs = interpolate_latent(
    model=model_to_use.to(device),
    x1=a_img,
    x2=b_img,
    steps=STEPS,
    method="lerp",
```

```
    use_mu=True,     # deterministic, smoother
    device=device
)

# Visualize interpolation result as a grid (left -> right transition)
show_grid(interp_imgs, title=f"Latent interpolation ({model_to_use.__class__.__name__}) — left→right transition", nrow=STEPS, figsi

```

```
Endpoint A: idx=9449, class=truck (9)
Endpoint B: idx=6250, class=deer (4)
```

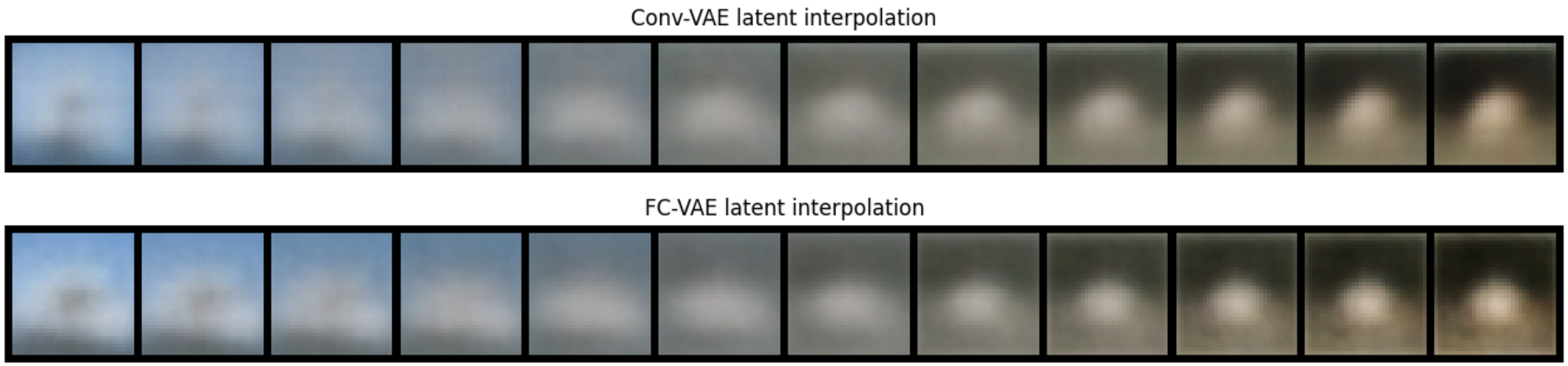
Original endpoint images (from CIFAR-10)



Latent interpolation (ConvVAE) — left→right transition

```
#### Cell 2.3 Compare Conv-VAE vs FC-VAE interpolation side-by-side
STEPS = 12

interp_conv = interpolate_latent(conv_vae.to(device), a_img, b_img, steps=STEPS, method="lerp", use_mu=True, device=device)
interp_fc   = interpolate_latent(fc_vae.to(device),   a_img, b_img, steps=STEPS, method="lerp", use_mu=True, device=device)
```

```

show_grid(interp_conv, title="Conv-VAE latent interpolation", nrow=STEPS, figsize=(16,3))
show_grid(interp_fc,   title="FC-VAE latent interpolation",   nrow=STEPS, figsize=(16,3))

```



Note:

> Interpolation is done in the latent space between two encoded points, producing intermediate latent vectors.
>
> Decoding those vectors shows whether the learned latent space is smooth: adjacent frames should change gradually rather than jump.

Results interpresation

> In sections B (2.2) and C (2.3), latent-space interpolation indicates that the Variational Autoencoder (VAE) learned a relatively smooth latent structure for CIFAR-10 images. As the latent representation transitions from the “truck” endpoint to

the “deer” endpoint, the decoded outputs change gradually without abrupt discontinuities. This suggests that nearby points in the latent space map to visually similar images, consistent with a smooth latent manifold.

Notably, the Conv-VAE produces more spatially consistent intermediate images during interpolation. Coarse shapes and background color regions evolve more smoothly and preserve a clearer overall layout, reflecting the convolutional encoder/decoder’s ability to retain local and hierarchical spatial features. In contrast, the FC-VAE interpolation appears more washed out and less structured, which is expected when images are flattened and spatial relationships are not modeled explicitly.

Using $\beta = 1.5$ increases the weight of the KL term, encouraging the latent distribution to remain closer to the standard normal prior. This typically promotes a smoother, more regular latent space, but it can also reduce sharpness and yield blurrier, more “average” outputs. In our results, the Conv-VAE still preserves more coherent structure than the FC-VAE under this stronger regularization, suggesting that convolutional inductive bias remains beneficial even with increased KL pressure.

Overall, while some blurriness remains, common for VAEs trained with pixel-wise reconstruction losses, the Conv-VAE interpolation demonstrates better preservation of spatial relationships and more coherent intermediate images than the fully connected VAE.

Task3

Train the VAE on a new dataset of your choice (e.g., CelebA for faces), and visualize generated samples. Experiment with sampling from different regions of the latent space and analyze how the generated outputs vary based on different latent vectors.

References / Citations

- AntixK. (n.d.). PyTorch-VAE [GitHub repository]. GitHub. Retrieved January 31, 2026, from https://github.com/AntixK/PyTorch-VAE
- moshesipper. (n.d.). vae-torch-celeba [GitHub repository]. GitHub. Retrieved January 31, 2026, from https://github.com/moshesipper/vae-torch-celeba

- bhpfelix. (n.d.). Variational-Autoencoder-PyTorch [GitHub repository]. GitHub. Retrieved January 31, 2026, from https://github.com/bhpfelix/Variational-Autoencoder-PyTorch
- julian-8897. (n.d.). conv-vae-pytorch [GitHub repository]. GitHub. Retrieved January 31, 2026, from https://github.com/julian-8897/conv-vae-pytorch


```
from google.colab import drive
from pathlib import Path
drive.mount('/content/drive')

import os

ZIP_PATH = "/content/drive/MyDrive/DS552_CS552_Generative_Artificial_Intelligence/Assignment_3_Variational_Autoencoders_VAEs/data/i

print("ZIP_PATH:", ZIP_PATH)
print("Exists?", os.path.exists(ZIP_PATH))

if os.path.exists(ZIP_PATH):
    print("File size (MB):", os.path.getsize(ZIP_PATH) / (1024**2))
else:
    print("❌ File not found — path is wrong or Drive not mounted")

```

```
Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount("/content/drive", force_remount=True).
ZIP_PATH: /content/drive/MyDrive/DS552_CS552_Generative_Artificial_Intelligence/Assignment_3_Variational_Autoencoders_VAEs/data/img_alig
Exists? True
File size (MB): 1376.620138168335
```

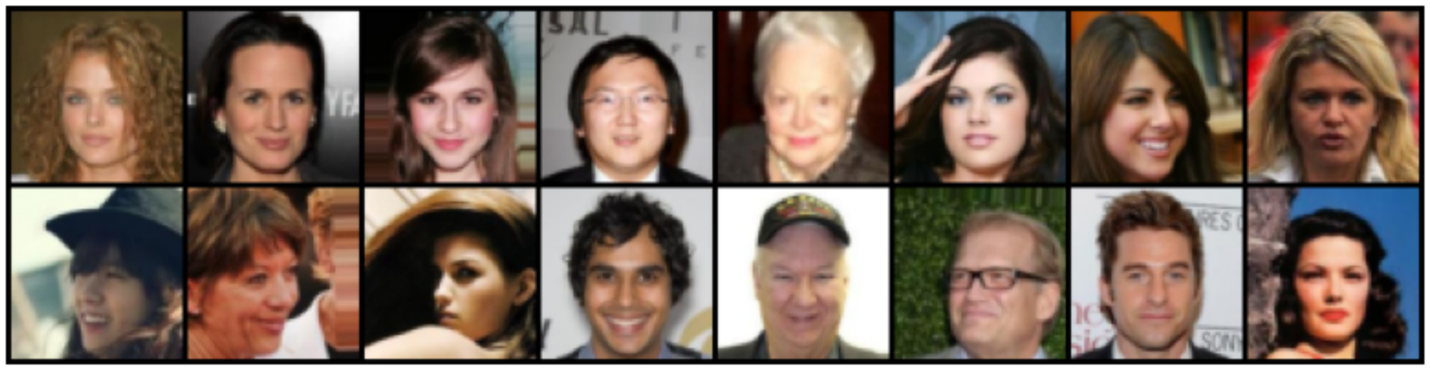
```
#### Cell 3.1 — Setup (imports, seed, device)
import zipfile
from glob import glob
from PIL import Image
from torch.utils.data import Dataset, random_split

# Unzip once (if not already extracted)
IMG_DIR = os.path.join("./data", "celeba_images", "img_align_celeba")
ZIP_PATH = "/content/drive/MyDrive/DS552_CS552_Generative_Artificial_Intelligence/Assignment_3_Variational_Autoencoders_VAEs/data/i
```

```python

os.makedirs(os.path.dirname(IMG_DIR), exist_ok=True)
if not os.path.exists(IMG_DIR) or len(os.listdir(IMG_DIR)) == 0:
    print("Extracting CelebA images...")
    with zipfile.ZipFile(ZIP_PATH, "r") as zf:
        zf.extractall(os.path.join("./data", "celeba_images"))
else:
    print("Images already extracted:", IMG_DIR)

class FlatImageFolder(Dataset):
    def __init__(self, img_dir, transform=None, max_items=None):
        self.paths = sorted(glob(os.path.join(img_dir, "*.jpg")))
        if max_items is not None:
            self.paths = self.paths[:max_items]
        self.transform = transform

    def __len__(self):
        return len(self.paths)

    def __getitem__(self, idx):
        img = Image.open(self.paths[idx]).convert("RGB")
        if self.transform:
            img = self.transform(img)
        return img, 0  # dummy label

dataset = FlatImageFolder(IMG_DIR, transform=transform)

# Make your own split
val_frac = 0.1
n_val = int(len(dataset) * val_frac)
n_train = len(dataset) - n_val

train_ds, valid_ds = random_split(
    dataset, [n_train, n_val],
    generator=torch.Generator().manual_seed(42)
)

train_loader = DataLoader(train_ds, batch_size=BATCH_SIZE, shuffle=True, num_workers=0, pin_memory=(device.type=="cuda"))
valid_loader = DataLoader(valid_ds, batch_size=BATCH_SIZE, shuffle=False, num_workers=0, pin_memory=(device.type=="cuda"))
```

```python

print("Train size:", len(train_ds), "Valid size:", len(valid_ds))

x0, _ = next(iter(train_loader))
show_grid(x0[:16], title="CelebA images (custom loader)", nrow=8, figsize=(10,5))

```

```
Images already extracted: ./data/celeba_images/img_align_celeba
Train size: 182340 Valid size: 20259
```

CelebA images (custom loader)



```python
# Cell 3.2 — Load CelebA (faces) from local ZIP (no torchvision download)

import os, zipfile
from glob import glob
from PIL import Image
from torch.utils.data import Dataset, random_split, DataLoader
import torchvision.transforms as T

# --- Config ---
IMG_SIZE = 64
BATCH_SIZE = 128  # if OOM, try 64
NUM_WORKERS = 0   # recommended in Colab (avoids multiprocessing shutdown noise)

MAX_IMAGES = None  # optional quick run: e.g., 50000 (uses only first N images after extraction)

transform = T.Compose([
```

```
    T.CenterCrop(178),
    T.Resize((IMG_SIZE, IMG_SIZE)),
    T.ToTensor(),
])

# Your Drive zip path (works for you already)
ZIP_PATH = "/content/drive/MyDrive/DS552_CS552_Generative_Artificial_Intelligence/Assignment_3_Variational_Autoencoders_VAEs/data/i

# Extract destination
IMG_DIR = os.path.join("./data", "celeba_images", "img_align_celeba")
os.makedirs(os.path.dirname(IMG_DIR), exist_ok=True)

# Extract once
if not os.path.exists(IMG_DIR) or len(os.listdir(IMG_DIR)) == 0:
    print("Extracting CelebA images...")
    with zipfile.ZipFile(ZIP_PATH, "r") as zf:
        zf.extractall(os.path.join("./data", "celeba_images"))
else:
    print("Images already extracted:", IMG_DIR)

class FlatImageFolder(Dataset):
    def __init__(self, img_dir, transform=None, max_items=None):
        self.paths = sorted(glob(os.path.join(img_dir, "*.jpg")))
        if max_items is not None:
            self.paths = self.paths[:max_items]
        self.transform = transform

    def __len__(self):
        return len(self.paths)

    def __getitem__(self, idx):
        img = Image.open(self.paths[idx]).convert("RGB")
        if self.transform:
            img = self.transform(img)
        return img, 0  # dummy label (VAE doesn't need labels)

dataset = FlatImageFolder(IMG_DIR, transform=transform, max_items=MAX_IMAGES)

# Make your own split (90/10)
```

```
val_frac = 0.1
n_val = int(len(dataset) * val_frac)
n_train = len(dataset) - n_val

train_ds, valid_ds = random_split(
    dataset, [n_train, n_val],
    generator=torch.Generator().manual_seed(42)
)

train_loader = DataLoader(
    train_ds, batch_size=BATCH_SIZE, shuffle=True,
    num_workers=NUM_WORKERS, pin_memory=(device.type=="cuda")
)
valid_loader = DataLoader(
    valid_ds, batch_size=BATCH_SIZE, shuffle=False,
    num_workers=NUM_WORKERS, pin_memory=(device.type=="cuda")
)

print("Train size:", len(train_ds), "| Valid size:", len(valid_ds))

# Quick visual sanity-check
x0, _ = next(iter(train_loader))
show_grid(x0[:16], title="CelebA samples (custom loader, 64x64)", nrow=8, figsize=(10,5))

```

```
Images already extracted: ./data/celeba_images/img_align_celeba
Train size: 182340 | Valid size: 20259
```

CelebA samples (custom loader, 64x64)

```
#### Cell 3.3 — Conv-VAE for 64×64
class ConvVAE64(nn.Module):
    def __init__(self, latent_dim=128):
        super().__init__()
        self.latent_dim = latent_dim

        # 64 -> 32 -> 16 -> 8 -> 4
        self.encoder = nn.Sequential(
            nn.Conv2d(3, 32, 4, 2, 1),   # (B,32,32,32)
            nn.BatchNorm2d(32),
            nn.ReLU(inplace=True),

            nn.Conv2d(32, 64, 4, 2, 1),  # (B,64,16,16)
            nn.BatchNorm2d(64),
            nn.ReLU(inplace=True),

            nn.Conv2d(64, 128, 4, 2, 1), # (B,128,8,8)
            nn.BatchNorm2d(128),
            nn.ReLU(inplace=True),

            nn.Conv2d(128, 256, 4, 2, 1),# (B,256,4,4)
            nn.BatchNorm2d(256),
```

```
            nn.ReLU(inplace=True),
        )

        self.enc_out_dim = 256 * 4 * 4
        self.fc_mu = nn.Linear(self.enc_out_dim, latent_dim)
        self.fc_logvar = nn.Linear(self.enc_out_dim, latent_dim)

        self.fc_dec = nn.Linear(latent_dim, self.enc_out_dim)

        # 4 -> 8 -> 16 -> 32 -> 64
        self.decoder = nn.Sequential(
            nn.ConvTranspose2d(256, 128, 4, 2, 1),  # (B,128,8,8)
            nn.BatchNorm2d(128),
            nn.ReLU(inplace=True),

            nn.ConvTranspose2d(128, 64, 4, 2, 1),   # (B,64,16,16)
            nn.BatchNorm2d(64),
            nn.ReLU(inplace=True),

            nn.ConvTranspose2d(64, 32, 4, 2, 1),    # (B,32,32,32)
            nn.BatchNorm2d(32),
            nn.ReLU(inplace=True),

            nn.ConvTranspose2d(32, 3, 4, 2, 1),     # (B,3,64,64)
            nn.Sigmoid(),                           # output in [0,1]
        )

    def encode(self, x):
        h = self.encoder(x).view(x.size(0), -1)
        mu = self.fc_mu(h)
        logvar = self.fc_logvar(h)
        return mu, logvar

    def reparameterize(self, mu, logvar):
        std = torch.exp(0.5 * logvar)
        eps = torch.randn_like(std)
        return mu + eps * std

    def decode(self, z):
```

```
        h = self.fc_dec(z).view(z.size(0), 256, 4, 4)
        return self.decoder(h)

    def forward(self, x):
        mu, logvar = self.encode(x)
        z = self.reparameterize(mu, logvar)
        recon = self.decode(z)
        return recon, mu, logvar

```

```
#### Cell 3.4 — Loss + Training Loop
def kl_divergence(mu, logvar):
    return -0.5 * torch.sum(1 + logvar - mu.pow(2) - logvar.exp())

def recon_loss_fn(recon_x, x, kind="mse"):
    # sum over batch+pixels
    if kind == "bce":
        return F.binary_cross_entropy(recon_x, x, reduction="sum")
    return F.mse_loss(recon_x, x, reduction="sum")

def vae_loss(recon_x, x, mu, logvar, beta=1.0, recon_kind="mse"):
    recon = recon_loss_fn(recon_x, x, kind=recon_kind)
    kl = kl_divergence(mu, logvar)
    total = recon + beta * kl
    bs = x.size(0)
    return total / bs, recon / bs, kl / bs

def train_vae(model, train_loader, valid_loader, epochs=10, lr=2e-4, beta=1.0, recon_kind="mse"):
    model = model.to(device)
    opt = torch.optim.Adam(model.parameters(), lr=lr)

    use_amp = (device.type == "cuda")
    scaler = torch.cuda.amp.GradScaler(enabled=use_amp)

    history = {"train_total": [], "train_recon": [], "train_kl": [],
               "valid_total": [], "valid_recon": [], "valid_kl": []}

    for epoch in range(1, epochs + 1):
```

```
        # ---- train ----
        model.train()
        t_total = t_recon = t_kl = 0.0
        n_train = 0

        pbar = tqdm(train_loader, desc=f"Epoch {epoch}/{epochs} [train]", leave=False)
        for x, _ in pbar:
            x = x.to(device, non_blocking=True)
            opt.zero_grad(set_to_none=True)

            with torch.cuda.amp.autocast(enabled=use_amp):
                recon, mu, logvar = model(x)
                loss, rloss, kl = vae_loss(recon, x, mu, logvar, beta=beta, recon_kind=recon_kind)

            scaler.scale(loss).backward()
            scaler.step(opt)
            scaler.update()

            bs = x.size(0)
            t_total += loss.item() * bs
            t_recon += rloss.item() * bs
            t_kl += kl.item() * bs
            n_train += bs
            pbar.set_postfix({"loss": loss.item(), "recon": rloss.item(), "kl": kl.item()})

        # ---- valid ----
        model.eval()
        v_total = v_recon = v_kl = 0.0
        n_valid = 0
        with torch.no_grad():
            for x, _ in tqdm(valid_loader, desc=f"Epoch {epoch}/{epochs} [valid]", leave=False):
                x = x.to(device, non_blocking=True)
                recon, mu, logvar = model(x)
                loss, rloss, kl = vae_loss(recon, x, mu, logvar, beta=beta, recon_kind=recon_kind)

                bs = x.size(0)
                v_total += loss.item() * bs
                v_recon += rloss.item() * bs
                v_kl += kl.item() * bs
```

```
                n_valid += bs

        train_total = t_total / n_train
        train_recon = t_recon / n_train
        train_kl = t_kl / n_train

        valid_total = v_total / n_valid
        valid_recon = v_recon / n_valid
        valid_kl = v_kl / n_valid

        history["train_total"].append(train_total)
        history["train_recon"].append(train_recon)
        history["train_kl"].append(train_kl)

        history["valid_total"].append(valid_total)
        history["valid_recon"].append(valid_recon)
        history["valid_kl"].append(valid_kl)

        print(
            f"Epoch {epoch:02d}/{epochs} | "
            f"Train total={train_total:.4f} recon={train_recon:.4f} kl={train_kl:.4f} | "
            f"Valid total={valid_total:.4f} recon={valid_recon:.4f} kl={valid_kl:.4f}"
        )

    return history

```

```
#### Cell 3.5 — Train on CelebA + quick reconstructions


LATENT_DIM = 128
EPOCHS = 10       # 10 for this assigment
LR = 2e-4
BETA = 1.0
RECON = "mse"

celeba_vae = ConvVAE64(latent_dim=LATENT_DIM).to(device)

```

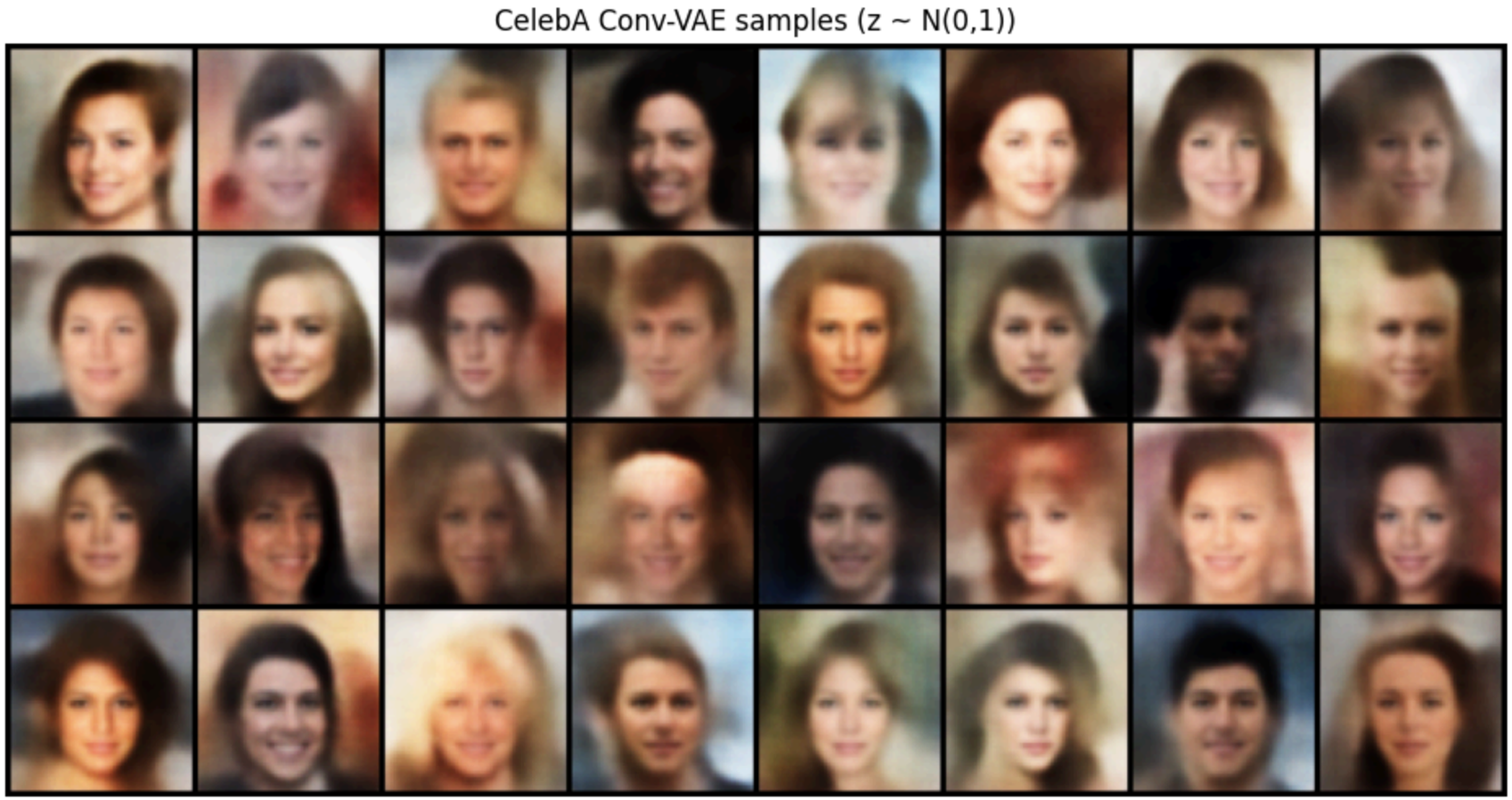
```
hist_celeba = train_vae(
    celeba_vae, train_loader, valid_loader,
    epochs=EPOCHS, lr=LR, beta=BETA, recon_kind=RECON
)

# (Sanity check) Save weights so we don’t lose training when Colab resets
torch.save(
    {"state_dict": celeba_vae.state_dict(), "latent_dim": LATENT_DIM},
    "celeba_convvae64.pt"
)

# Reconstructions on a validation batch (use inference_mode for speed)
celeba_vae.eval()
xv, _ = next(iter(valid_loader))
xv = xv.to(device)[:8]

with torch.inference_mode():
    recon, _, _ = celeba_vae(xv)

viz = torch.cat([xv, recon.clamp(0, 1)], dim=0)
show_grid(viz, title="CelebA reconstructions: original (top) vs recon (bottom)", nrow=8, figsize=(14,4))


```

```
/tmp/ipython-input-3623721387.py:23: FutureWarning: `torch.cuda.amp.GradScaler(args...)` is deprecated. Please use `torch.amp.GradScaler
```

```
#### Cell 3.6 — Generate samples from the prior
@torch.no_grad()
def sample_prior(model, latent_dim, n=16, scale=1.0):
    model.eval()
    z = torch.randn(n, latent_dim, device=device) * scale
    x = model.decode(z).clamp(0, 1)
    return x

samples = sample_prior(celeba_vae.to(device), LATENT_DIM, n=32, scale=1.0)
show_grid(samples, title="CelebA Conv-VAE samples (z ~ N(0,1))", nrow=8, figsize=(12,6))


```

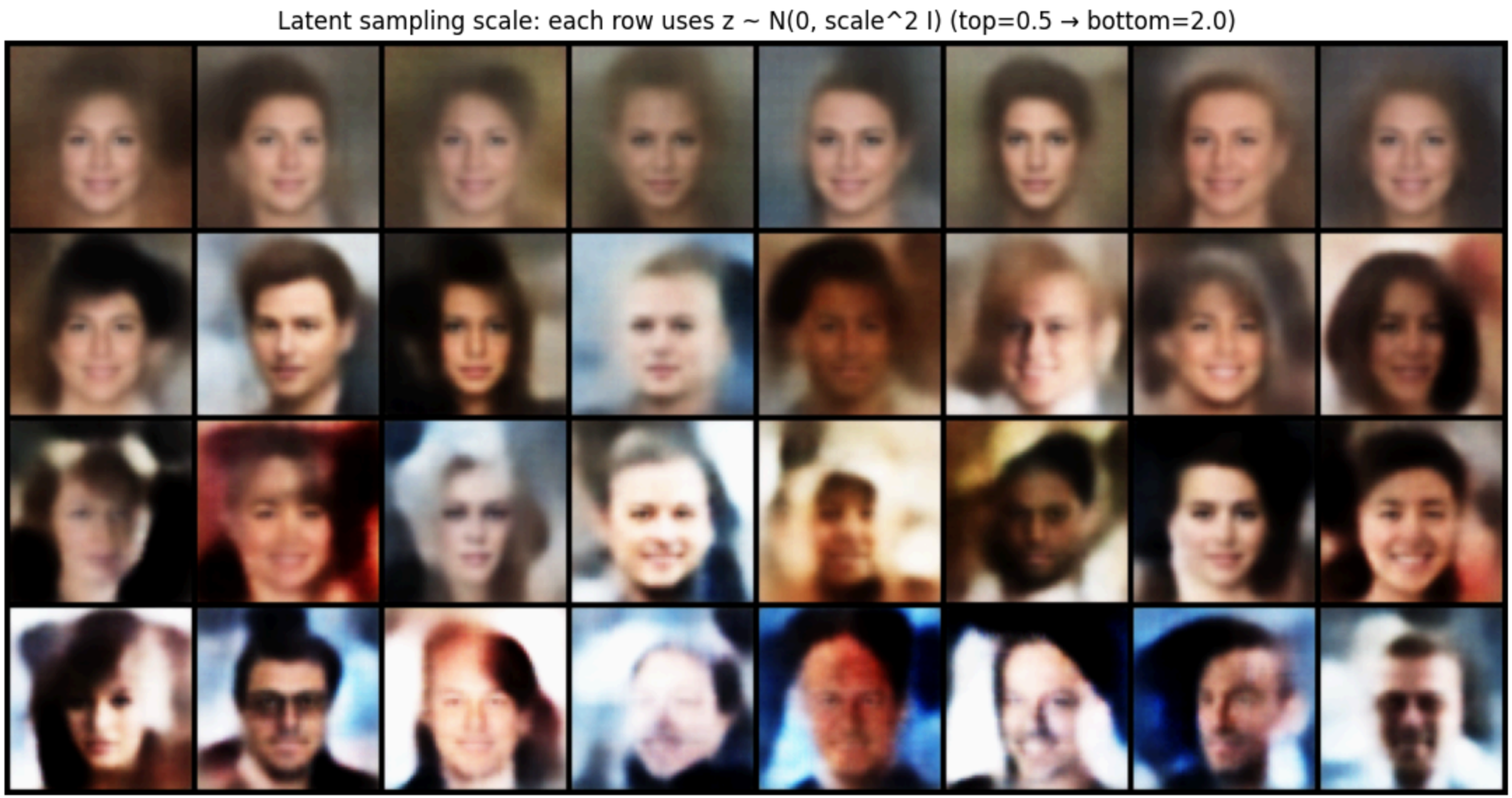
```
Epoch 03/10 | Train total=194.3585 recon=132.3120 kl=62.0465 | Valid total=191.6297 recon=129.3513 kl=62.2785



Epoch 04/10 | Train total=190.4936 recon=128.2034 kl=62.2902 | Valid total=187.7902 recon=124.5183 kl=63.2719



Epoch 05/10 | Train total=187.9731 recon=125.5713 kl=62.4018 | Valid total=187.2936 recon=124.4094 kl=62.8842



Epoch 06/10 | Train total=186.1303 recon=123.6210 kl=62.5094 | Valid total=184.6971 recon=122.6068 kl=62.0903



Epoch 07/10 | Train total=184.6992 recon=122.1345 kl=62.5647 | Valid total=184.0491 recon=121.2157 kl=62.8334



Epoch 08/10 | Train total=183.5224 recon=120.9248 kl=62.5975 | Valid total=182.9543 recon=119.8686 kl=63.0857
```

Epoch 9/10 [train]: 6% 92/1423 [00:29<07:47, 2.85it/s, loss=186, recon=122, kl=65.4]




```
#### Cell 3.7 — Explore “different regions” of the latent space
#“Temperature” / scale sampling (near vs far from origin)
scales = [0.5, 1.0, 1.5, 2.0]
rows = []
for s in scales:
    rows.append(sample_prior(celeba_vae.to(device), LATENT_DIM, n=8, scale=s))
grid = torch.cat(rows, dim=0)

show_grid(
    grid,
```

```
    title="Latent sampling scale: each row uses z ~ N(0, scale^2 I) (top=0.5 → bottom=2.0)",
    nrow=8,
    figsize=(14,7)
)

```



Cell 3.7 Analysis latent "temperatur" / scale sampling

Each row samples $z \sim N$ (0 , scale 2 I) z∼N(0,scale 2 I), so larger scale moves latent points farther from the origin. At scale = 0.5, faces look more consistent and “average,” reflecting sampling from high-density latent regions. At scale = 1.0–1.5, outputs become more diverse (hair, shape, lighting) while still face-like. At scale = 2.0, images show more blur and artifacts, suggesting off-manifold sampling. Overall, smaller scales give higher quality but less variety, while larger scales increase diversity at the cost of realism.

```
#### Cell 3.8 — Posterior neighborhood sampling (around a real image)
@torch.no_grad()
def posterior_neighborhood(model, x, alphas=(0.0, 0.25, 0.5, 1.0), n_per_alpha=6):
    model.eval()
    x = x.unsqueeze(0).to(device)  # (1,3,64,64)
```