Environment Config
(not use virtual env)

1. Check config:
   Check Python ≥ 3.8: python –version

   Check PyTorch with GPU support:
   python
   >>>import torch
   >>>print(torch.__version__)
   >>>print(torch.cuda.is_available()): True

   Check CUDA-capable GPU (local or via cloud like GCP)
   nvidia-smi
   CUDA (Compute Unified Device Architecture) is a parallel computing platform and API created by NVIDIA. It allows developers to run code on NVIDIA GPUs (Graphics Processing Units) to achieve massive performance gains, especially for tasks involving: Matrix operations, Deep learning, Scientific computing, Graphics and image processing

2. Create virtual env:
   Clone repo & install dependencies:
   git clone https://github.com/karpathy/nanoGPT.git
   cd nanoGPT
   Set up virtual env:
   python -m venv venv
   venv\Scripts\activate
   (venv) junrong@Junrong:~/nanoGPT$
   Install dependencies:
   Pip install tiktoken numpy requests transformers datasets wandb
   pip install torch torchvision torchaudio --index-url https://download.pytorch.org/whl/cu121
   Check:
   python
   >>> import torch
   >>> print(torch.__version__)
   >>> print(torch.cuda.is_available())

Prepare data:
python data/shakespeare_char/prepare.py