

## 基础作业：

1、使用 InternLM-Chat-7B 模型生成 300 字的小故事（需截图）：

```
(base) root@intern-studio:~# conda activate internlm-demo
(internlm-demo) root@intern-studio:~# python /root/code/InternLM/cli_demo.py
python: can't open file '/root/code/InternLM/cli_demo.py': [Errno 2] No such file or directory
(internlm-demo) root@intern-studio:~# python /root/code/InternLM/cli_demo.py

Loading checkpoint shards: 100% | 8/8 [00:48<00:00, 6.03s/it]
=====Welcome to InternLM chatbot, type 'exit' to exit.=====
User >>> robot >>> Hello! How can I assist you today?
User >>> 你好
robot >>> 您好！有什么我可以帮忙的吗？
User >>> 300

robot >>> 您好，有什么我可以帮您吗？
User >>> robot >>> 您好，有什么我可以帮您吗？
User >>>
robot >>> 您好，有什么我可以帮您吗？
User >>> 请生成一个300字的小故事
robot >>> 曾经有一只小狗，它叫做米奇。米奇是一只非常可爱的金毛犬，它的毛色金黄，耳朵尖尖的，眼睛亮亮的。米奇的妈妈是一只母狗，它非常聪明，能够听懂人类的语言，并且教给米奇很多规矩和技能。

一天，米奇的妈妈带它去散步，在路上遇到了一只受伤的小猫。小猫的腿受伤了，无法走路。米奇看到了，毫不犹豫地走过去，把小猫抱起来，带回家，照顾它。

米奇和妈妈一起给小猫治疗，每天给它喂食、清洗伤口。米奇还和它一起玩耍，小猫很快变得健康了。

米奇和它的新朋友一起生活了很多天，米奇也成为了小猫的好朋友。但是，一天，小猫突然失踪了。米奇非常难过，它一直在寻找小猫，最终在一个小角落里找到了它，小猫已经奄奄一息。米奇马上带小猫回家，给它治疗，终于救了它的命。

从那时起，米奇和它的新朋友成为了好朋友，它们一起生活了很多年，米奇也学会了照顾小猫，保护它。它们成为了一对最好的朋友，每天都在一起玩耍、探险。
User >>> exit
(internlm-demo) root@intern-studio:~#
```

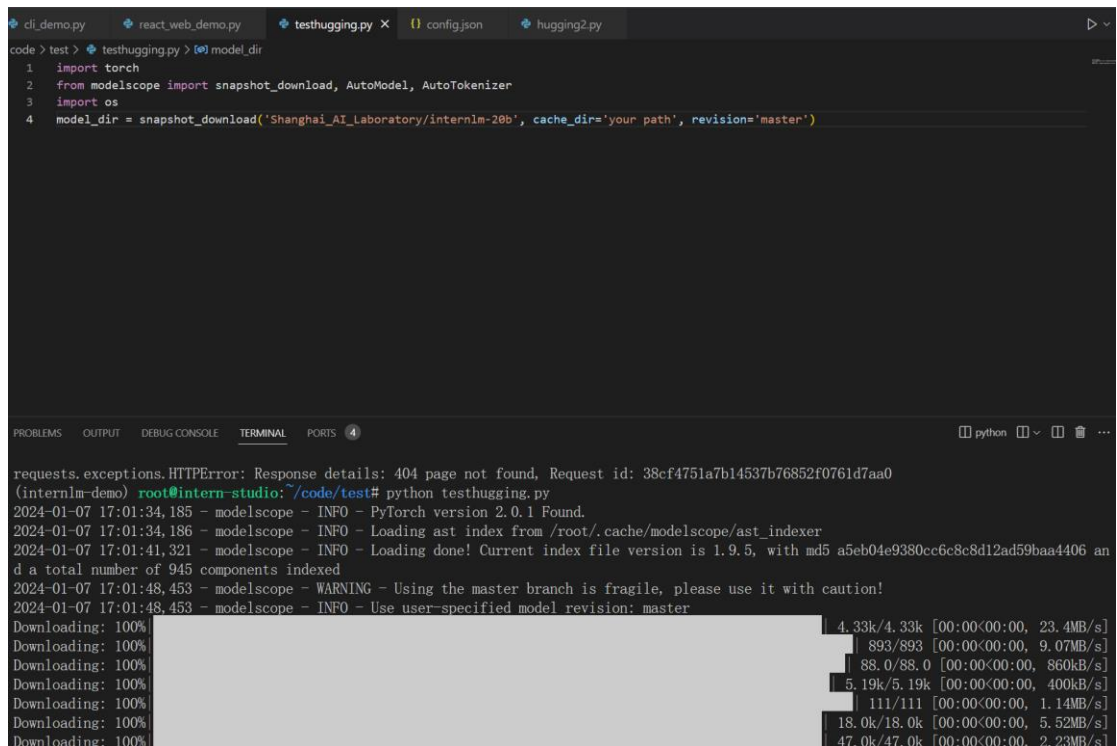
2、熟悉 hugging face 下载功能，使用 huggingface\_hub python 包，下载 InternLM-20B 的 config.json 文件到本地（需截图下载过程）：

hugging face 的网络连接不行

```
code > test > hugging2.py > ...
1 import os
2 from huggingface_hub import hf_hub_download # Load model directly
3
4 hf_hub_download(repo_id="internlm/internlm-7b", filename="config.json")

response = get_session().request(method=method, url=url, **params)
File ~/root/.conda/envs/internlm-demo/lib/python3.10/site-packages/requests/sessions.py, line 589, in request
resp = self.send(prepared_request, **send_kwargs)
File ~/root/.conda/envs/internlm-demo/lib/python3.10/site-packages/requests/sessions.py, line 703, in send
r = adapter.send(request, **kwargs)
File ~/root/.conda/envs/internlm-demo/lib/python3.10/site-packages/huggingface_hub/utils/_http.py, line 6
return super().send(request, *args, **kwargs)
File ~/root/.conda/envs/internlm-demo/lib/python3.10/site-packages/requests/adapters.py, line 513, in send
raise ProxyError(e, request=request)
requests.exceptions.ProxyError: (MaxRetryError("HTTPSConnectionPool(host='huggingface.co', port=443): Max re
ernlm-7b/resolve/main/config.json (Caused by ProxyError('Cannot connect to proxy.', TimeoutError('timed out'
b'500:187504650400'))))
```

改用 modelscope 下载

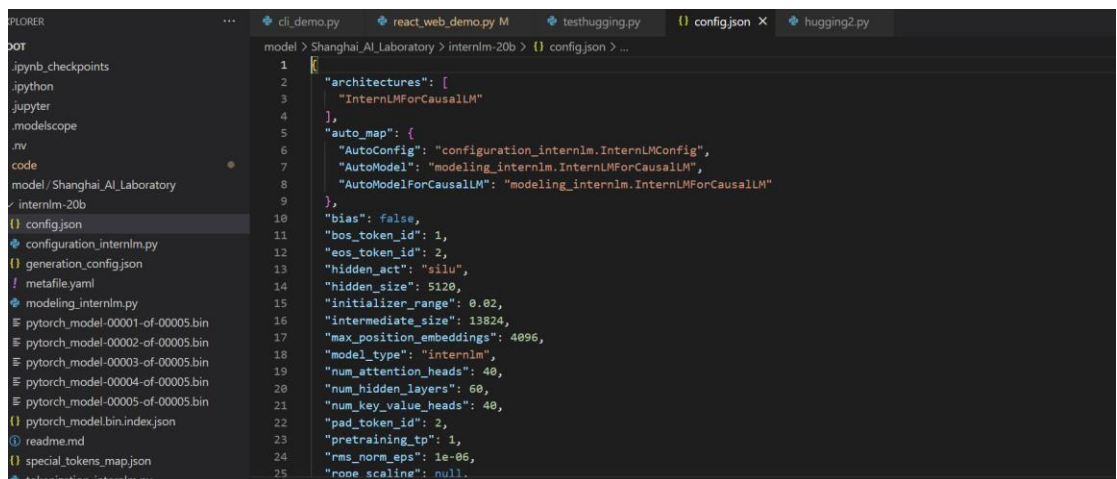


The image shows a VS Code editor with a file explorer on the left and a code editor on the right. The code editor displays a Python script named `testhugging.py` with the following content:

```
1 import torch
2 from modelscope import snapshot_download, AutoModel, AutoTokenizer
3 import os
4 model_dir = snapshot_download('Shanghai_AI_Laboratory/internlm-20b', cache_dir='your path', revision='master')
```

The terminal at the bottom shows the output of running `python testhugging.py`. It displays various logs from the `modelscope` package, including information about the PyTorch version, the loading of the AST index, and the downloading of the model files. The logs indicate that the model is being downloaded from the `Shanghai_AI_Laboratory/internlm-20b` repository, and the current index file version is 1.9.5. The download progress is shown as a series of bars and percentages, with the final status being 100% for all files.

## Config.json

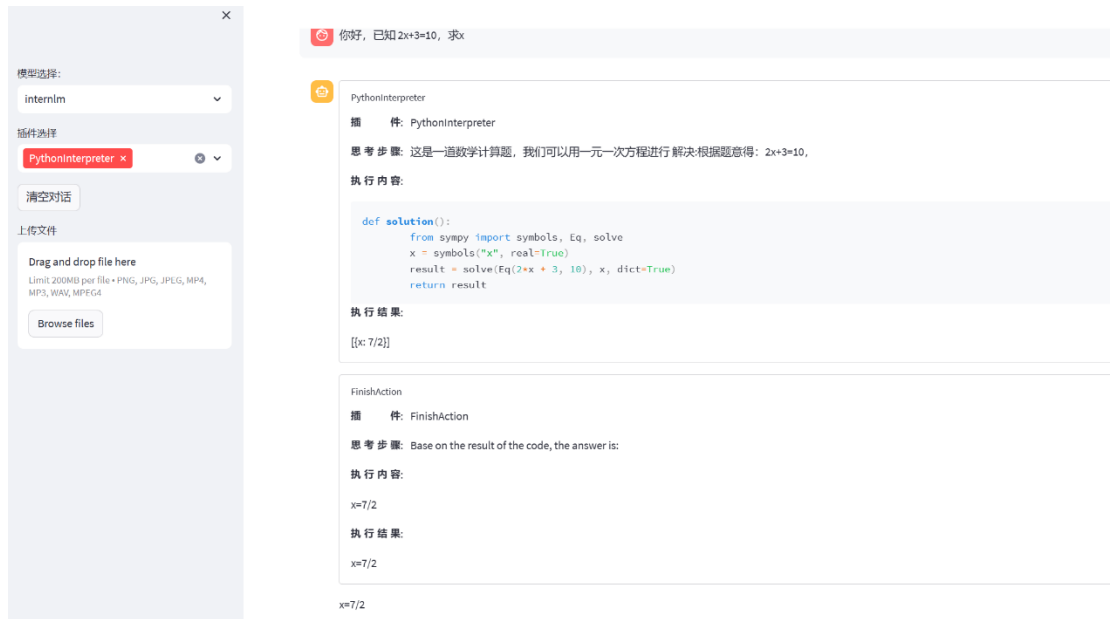


The image shows a VS Code editor with a file explorer on the left and a code editor on the right. The code editor displays a JSON configuration file named `config.json` with the following content:

```
1 {
2   "architectures": [
3     "InternLMForCausalLM"
4   ],
5   "auto_map": {
6     "AutoConfig": "configuration_internlm.InternLMConfig",
7     "AutoModel": "modeling_internlm.InternLMForCausalLM",
8     "AutoModelForCausalLM": "modeling_internlm.InternLMForCausalLM"
9   },
10  "bias": false,
11  "bos_token_id": 1,
12  "eos_token_id": 2,
13  "hidden_act": "silu",
14  "hidden_size": 5120,
15  "initializer_range": 0.02,
16  "intermediate_size": 13824,
17  "max_position_embeddings": 4096,
18  "model_type": "internlm",
19  "num_attention_heads": 40,
20  "num_hidden_layers": 60,
21  "num_key_value_heads": 40,
22  "pad_token_id": 2,
23  "pretraining_tp": 1,
24  "rms_norm_eps": 1e-06,
25  "rope_scaling": null,
```

## 进阶作业（可选做）

- 1、完成浦语·灵笔的图文理解及创作部署（需截图）：



## 2、完成 Lagent 工具调用 Demo 创作部署（需截图）：

