

入门关卡——第 2 关

1 leetcode:

通过

Vic 提交于 2024.11.03 15:16

官方题解

写题解



华为面试冲刺
冲刺华为面试

→

🕒 执行用时分布

11 ms | 击败 28.33%

📊 复杂度分析

💾 消耗内存分布

11.16 MB | 击败 40.01%



代码 | C++

```
class Solution {
public:
    bool canConstruct(string ransomNote, string magazine) {

        std::unordered_map<char, int> charCount;

        for (char c : magazine) {
            charCount[c]++;
        }
    }
};
```

查看更多

更多挑战

691. 贴纸拼词

1160. 拼写单词

添加备注，例如「暴力解法」、「方法一」等

选择相关标签

0/5

✔

2 Debug:

res 格式不是正规 json 格式

直接打印 res

```
(py) root@intern-studio-002867:~/test# python test.py
Traceback (most recent call last):
  File "/root/test/test.py", line 33, in <module>
    res_json = json.loads(res)
  File "/root/py/lib/python3.10/json/_init_.py", line 346, in loads
    return default_decoder.decode(s)
  File "/root/py/lib/python3.10/json/decoder.py", line 337, in decode
    obj, end = self.raw_decode(s, idx=_w(s, 0).end())
  File "/root/py/lib/python3.10/json/decoder.py", line 355, in raw_decode
    raise JSONDecodeError("Expecting value", s, err.value) from None
json.decoder.JSONDecodeError: Expecting value: line 1 column 1 (char 0)
```

Variables

Locals

> special variables

> function variables

> class variables

self = <pygment.lexers.python.PythonLexer object at 0x7f4b7f2b2b20>

client = <openai.OpenAI object at 0x7f4b7f2b2b20>

content = "书生浦语InternLM2.5是上海人工智能实验室于2024年7月推出的新一代大语言模型，提供1.8B、7B和20B三种参数版本，以适应不同需求。该模型在复杂场景下的推理能力得到全面增强，支持1M超长上下文，能自主进行互联网搜索并整合信息。"

json = <module 'json' from '/root/py/lib/python3.10/json/_init_.py'>

os = <module 'os' from '/root/py/lib/python3.10/os.py'>

prompt = "请帮我从以下` `内的这段模型介绍文字中提取关于该模型的信息，要求包含模型名字、开发机构、提供参数版本。"

res = '{"model_name": "书生浦语InternLM2.5", "developer": "上海人工智能实验室", "parameter_versions": [1.8B, 7B, 20B], "context_length": 1M}'

> globals

> locals

test.py

1 import sys

2

3 from openai import OpenAI

4 import json

5 import os

6 def internlm_gen(prompt, client):

7 """

8 LLM生成函数

9 Param prompt: prompt string

10 Param client: OpenAI client

11 """

12 response = client.chat.completions.create(

13 model="internlm2.5-latest",

14 messages=[

15 {"role": "user", "content": prompt},

16],

17 stream=False

18)

19 return response.choices[0].message.content

20

21 api_key = os.getenv('api_key')

22 client = OpenAI(base_url="https://internlm-chat.intern-ai.org.cn/puyu/api/v1/

23

24 content = ""

25 书生浦语InternLM2.5是上海人工智能实验室于2024年7月推出的新一代大语言模型，提供1.8B、7B和

26 该模型在复杂场景下的推理能力得到全面增强，支持1M超长上下文，能自主进行互联网搜索并整合信息。

27 """

28 prompt = f"""

29 请帮我从以下` `内的这段模型介绍文字中提取关于该模型的信息，要求包含模型名字、开发机构、提供参

30 `{content}`

31 """

32 res = internlm_gen(prompt, client)

33

34 print(res)

```
25 书生浦语InternLM2.5是上海人工智能实验室于2024年7月推出的新一代大语言模型，提供1.8B、7B和20B
26 该模型在复杂场景下的推理能力得到全面增强，支持1M超长上下文，能自主进行互联网搜索并整合信息。
27 """
28 prompt = f"""
29 请帮我从以下` `内的这段模型介绍文字中提取关于该模型的信息，要求包含模型名字、开发机构、提供参数
30 `{content}`
31 """
32 res = internlm_gen(prompt, client)
33
34 print(res)
```

```
(/root/py) root@intern-studio-002867:~/test# cd test
(/root/py) root@intern-studio-002867:~/test# python test.py
```json
{
 "model_name": "书生浦语InternLM2.5",
 "developer": "上海人工智能实验室",
 "parameter_versions": [1.8B, 7B, 20B],
 "context_length": 1M
}
```
```

3：使用 VScode 连接开发机后使用 `pip install -t` 命令安装一个 `numpy` 到看开发机 `/root/myenvs` 目录下，并成功在一个新建的 `python` 文件中引用。

Pip install numpy 但 pip 路径不对

```
(base) root@intern-studio-002867:~# conda deactivate
root@intern-studio-002867:~# conda activate /share/envs/pytorch2.1.2-base
(pytorch2.1.2-base) root@intern-studio-002867:~# ls
share
(pytorch2.1.2-base) root@intern-studio-002867:~# mkdir -p /root/myenvs
(pytorch2.1.2-base) root@intern-studio-002867:~# pip install numpy --target /root/myenvs
bash: /share/envs/pytorch2.1.2-base/bin/pip: /root/.conda/envs/pytorch2.1.2-base/bin/python: bad interpreter: No such file or directory
(pytorch2.1.2-base) root@intern-studio-002867:~# ls
myenvs share
(pytorch2.1.2-base) root@intern-studio-002867:~# /share/envs/pytorch2.1.2-base/bin/python --version
Python 3.10.14
```

使用 conda install:

```
(pytorch2.1.2-base) root@intern-studio-002867:~# conda install numpy -p /root/myenvs
Retrieving notices: ...working... done
Collecting package metadata (current repodata.json): done
Solving environment: unsuccessful initial attempt using frozen solve. Retrying with flexible solve.
Solving environment: unsuccessful attempt using repodata from current repodata.json, retrying with next repodata source.
Collecting package metadata (repodata.json): done
Solving environment: done

## Package Plan ##

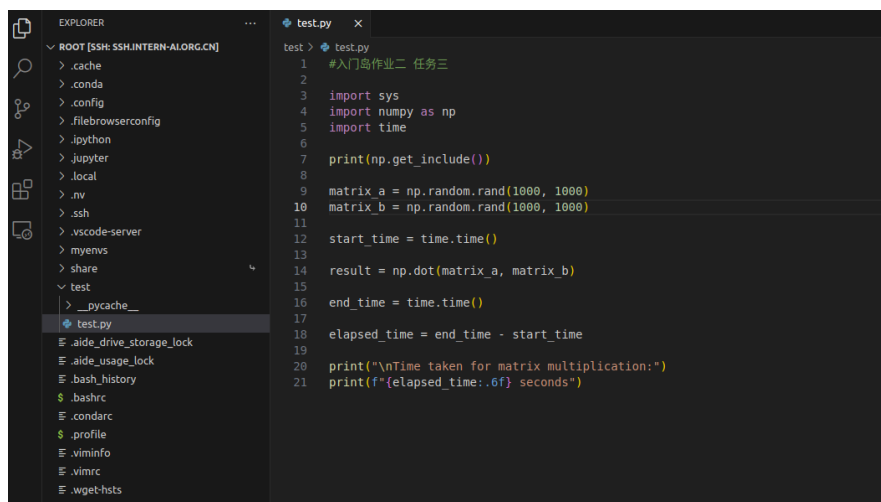
environment location: /root/myenvs

added / updated specs:
- numpy

The following packages will be downloaded:

package	build	size	channel
_libgcc_mutex-0.1 | main | 3 KB | defaults
_openmp_mutex-5.1 | _gnu | 21 KB | defaults
blas-1.0 | mkl | 6 KB | defaults
bzip2-1.0.8 | h5eee18b_6 | 262 KB | defaults
ca-certificates-2024.9.24 | h06a4308_0 | 130 KB | defaults
expat-2.6.3 | h6a678d5_0 | 176 KB | defaults
intel-openmp-2023.1.0 | hdb19cb5_46306 | 17.2 MB | defaults
```

编写一个 numpy 测试样例:



```
test.py
1 #入门岛作业二 任务三
2
3 import sys
4 import numpy as np
5 import time
6
7 print(np.get_include())
8
9 matrix_a = np.random.rand(1000, 1000)
10 matrix_b = np.random.rand(1000, 1000)
11
12 start_time = time.time()
13
14 result = np.dot(matrix_a, matrix_b)
15
16 end_time = time.time()
17
18 elapsed_time = end_time - start_time
19
20 print("\nTime taken for matrix multiplication:")
21 print(f"{elapsed_time:.6f} seconds")
```

成功输出：

```
• (pytorch2.1.2-base) root@intern-studio-002867:~# ls
myenvs share test
• (pytorch2.1.2-base) root@intern-studio-002867:~# cd test
• (pytorch2.1.2-base) root@intern-studio-002867:~/test# ls
__pycache__ test.py
• (pytorch2.1.2-base) root@intern-studio-002867:~/test# python test.py
/root/share/envs/pytorch2.1.2-base/lib/python3.10/site-packages/numpy/core/include

Time taken for matrix multiplication:
0.312575 seconds
○ (pytorch2.1.2-base) root@intern-studio-002867:~/test#
```