Meta Al Codellama model

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Model scale

Got Code Llama

Use Code Llama

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Dialogue

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Reference material

Demonstration environment

Development Board 8: Raspberry Pi 500

SD(TF)card: 32G (Above 16G, the larger the capacity, the more models can be experienced)

Raspberry Pi 500 (8G RAM): Run 8B and below parameter models

Code Llama is an open-source Large Language Model (LLM) specifically designed by the Meta Al department for understanding and generating code.

Model scale

| Model | Parameter |
|------------|-----------|
| Code Llama | 7B |
| Code Llama | 13B |
| Code Llama | 34B |
| Code Llama | 70B |

Raspberry Pi 500 (8G RAM): Code Llama model testing using 7B parameters

Got Code Llama

Using the pull command will automatically pull the models from the Ollama model library.

ollama pull codellama:7b

```
File Edit Tabs Help

pi@raspberrypi:- $ ollama pull codellama:7b

pulling manifest

pulling 36A3f93578ec... 190%

pulling 950474a55ebb... 190%

pulling 29e493f670ec... 190%

pulling 7f6a57943A88... 190%

pulling 316526ac7323... 190%

verifying sha256 digest

writing manifest

removing any unused layers

success

pi@raspberrypi:- $ 

pi@raspbe
```

Use Code Llama

Run Code Llama

If the system does not have a running model, the system will automatically pull the Code Llama 7B model and run it: **The Pi500_Al_Pure image does not provide this model!**

```
ollama run codellama:7b
```

Dialogue

```
Write me a function that outputs the fibonacci sequence
```

The time to reply to the question is related to the hardware configuration, please be patient.

```
File Edit Tabs Help

pi@raspberrypi:~ $ ollama run codellama:70

>>>> Write me a function that outputs the fibonacci sequence

Here is a function in Python that calculates and prints the first 10 numbers of the Fibonacci sequence:

def fib(n):
    if n <= 1:
        return n
    else:
        return fib(n-1) + fib(n-2)

print([fib(i) for i in range(1, 10)])

This function uses a recursive approach to calculate the Fibonacci sequence. It takes an integer 'n' as input and returns the 'n'-th number of the Fibonacci sequence. The function has a base case where 'n' <= 1', in which case it simply returns 'n' otherwise, it calculates the result for 'fib(n-1)'
and 'fib(n-2)', adds them together, and returns the result.

The function also uses a list comprehension to print the first 10 numbers of the Fibonacci sequence. The list comprehension creates a new list containing the result of calling the 'fib' function on each number in the range from 1 to 10.

Here is an example of how you can use this function:

print(fib(5)) # prints 5

print(fib(fib(7)) # prints 5

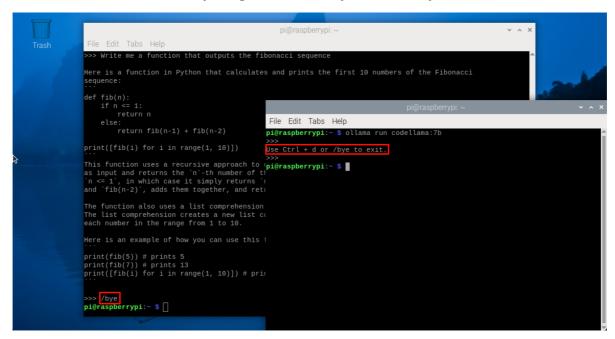
print(fib(fib(7)) # prints 13

print([fib(1)) for i in range(1, 10)]) # prints [0, 1, 1, 2, 3, 5, 8, 13, 21, 34]

>>>> Send a message (/7 for help)
```

End conversation

You can end the conversation by using the shortcut key 'Ctrl+d' or '/bye'.



Reference material

Ollama

Website: https://ollama.com/

GitHub: https://github.com/ollama/ollama

Code Llama

Ollama Model: https://ollama.com/library/codellama

GitHub: https://github.com/meta-llama/codellama