StarCoder2

StarCoder2
1.Model scale
2.Pull StarCoder2
3. Use StarCoder2
3.1 Running StarCoder2
3.2. Have a conversation
3.3. End the conversation
References

> **Demonstration environment**

Development board: rdk x5 series motherboard

SD card: 64G

> **Tutorial application scope**: Whether the motherboard can run is related to the available memory of the system. The user's own environment and the program running in the background may cause the model to fail to run

Board model	Ollama direct operation
rdk x5 8GB	√
rdk x5 4GB	√(Need to run the small parameter version)

The performance of this model is poor, and there may be problems such as chaotic replies or even repeated replies during the conversation. It is not recommended to use it!

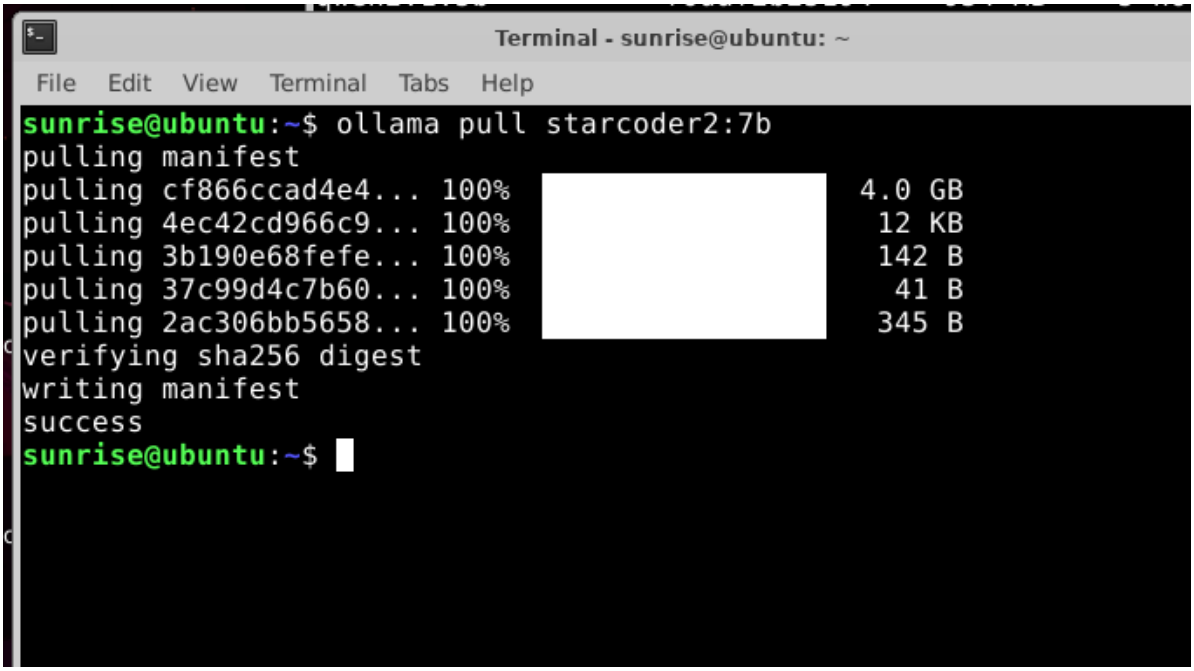
1.Model scale

Model	Parameter
StarCoder2	3B
StarCoder2	7B

2.Pull StarCoder2

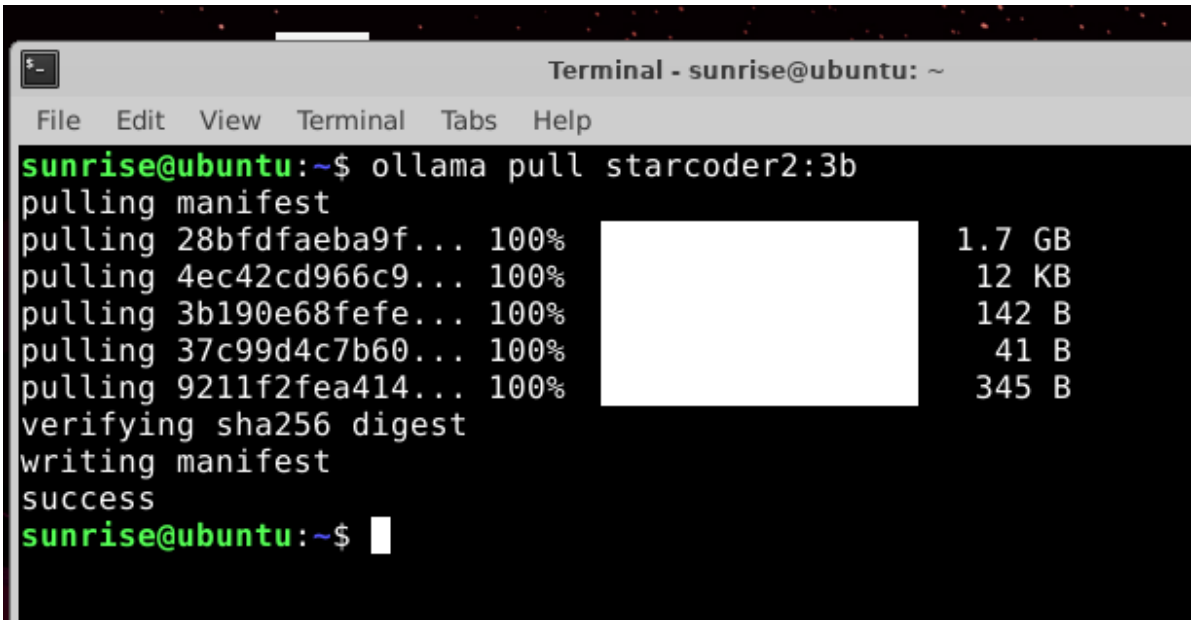
Using the pull command will automatically pull the models from the TinyLlama model library:

```
ollama pull starcoder2:7b
```



Small parameter version model: motherboards with 4GB or less memory can run this

```
ollama pull starcoder2:3b
```



3. Use StarCoder2

3.1 Running StarCoder2

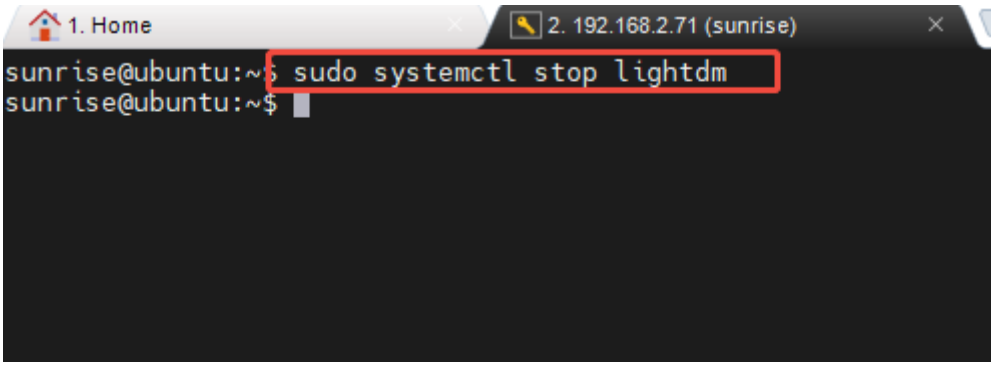
If the system does not have a running model, it will automatically pull the StarCoder2 7B model and run it:

```
ollama run starcoder2:7b
```

A motherboard with 4gb memory can run this. Note that you need to turn off the desktop display and docker service to run it:

Turn off the desktop in the ssh terminal:

```
sudo systemctl stop lightdm
```

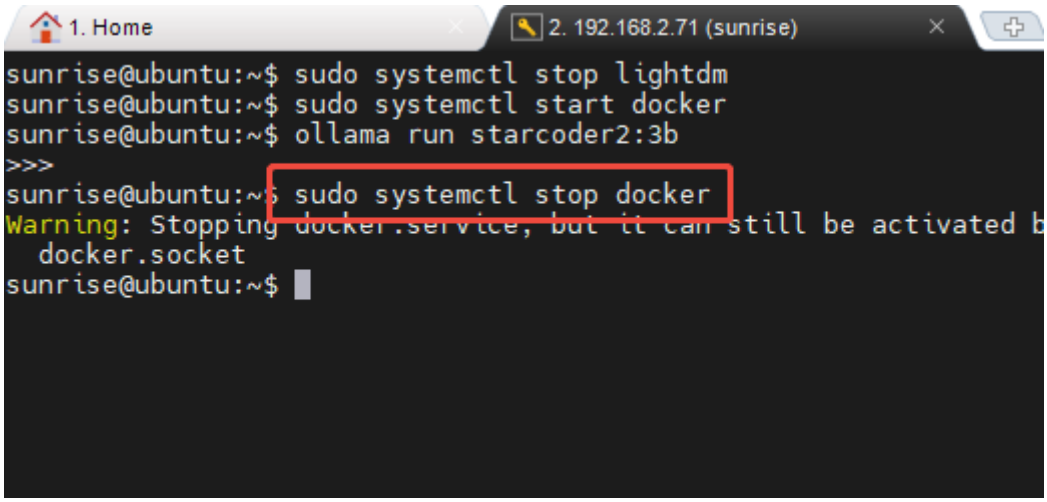


Open the desktop display command:

```
sudo systemctl start lightdm
```

Shut down the docker service command:

```
sudo systemctl stop docker
```

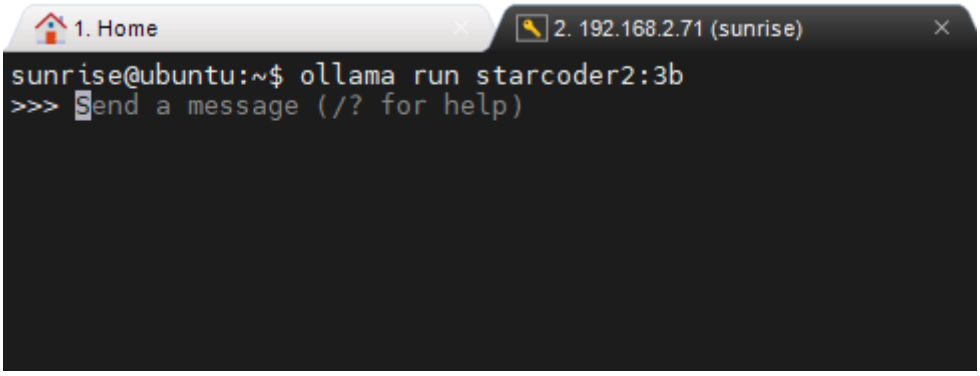


Start Docker service command

```
sudo systemctl start docker
```

Run the model

```
ollama run starcoder2:3b
```

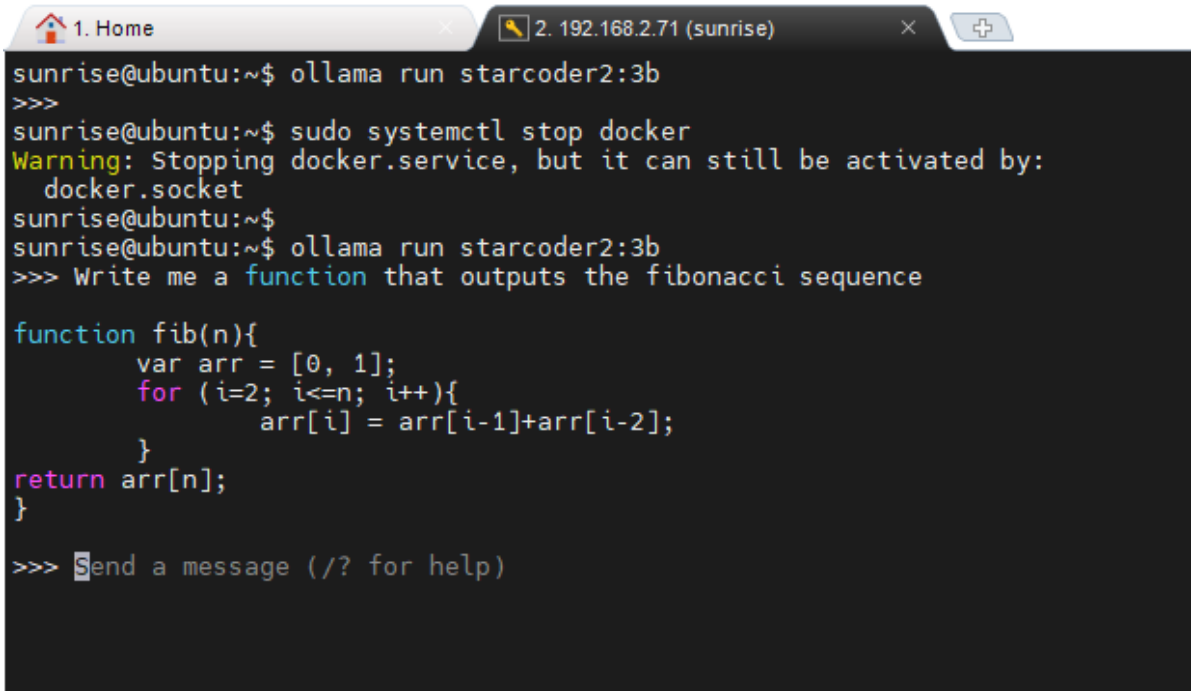


3.2. Have a conversation

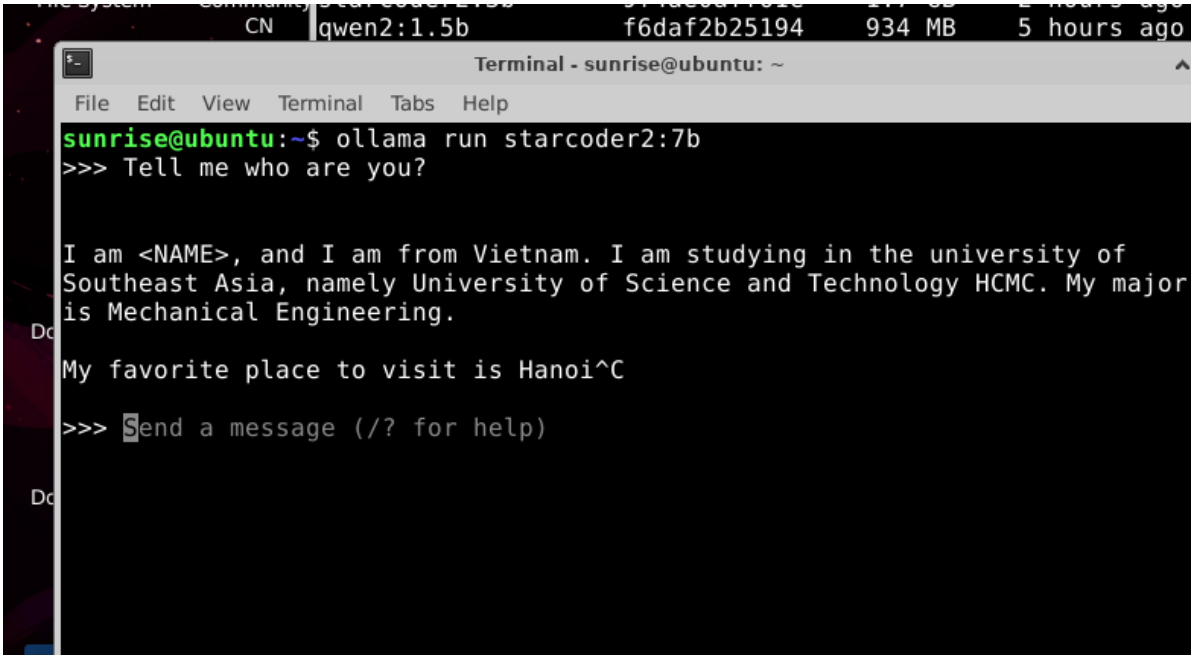
```
Write me a function that outputs the fibonacci sequence
```

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

rdk x5 4gb test image:

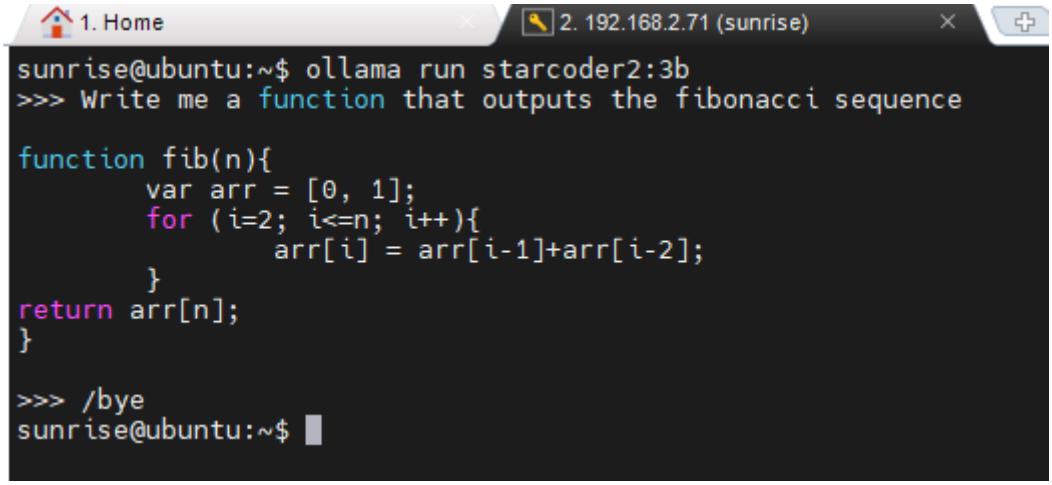


rdk x5 8gb test image:



3.3. End the conversation

Use the `Ctrl+d` shortcut key or `/bye` to end the conversation!



References

> **Ollama**

Website：https://ollama.com/

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

> **StarCoder2**

GitHub：https://ollama.com/library/starcoder2

Ollama model：https://ollama.com/library/starcoder2