

TinyLlama

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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 x8GB	√
rdk x5 4GB	√

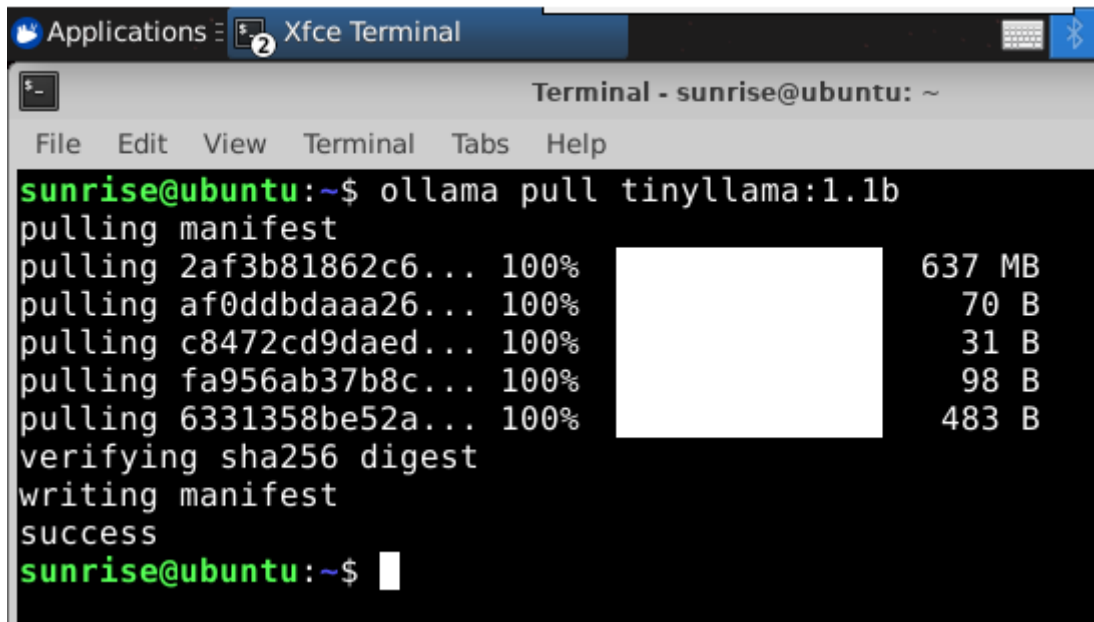
1. Model scale

Model	Parameter
TinyLlama	1.1B

2. Pull TinyLlama

Using the pull command will automatically pull the model from the Ollama model library:

```
ollama pull tinyllama:1.1b
```



```
sunrise@ubuntu:~$ ollama pull tinyllama:1.1b
pulling manifest
pulling 2af3b81862c6... 100% 637 MB
pulling af0ddbdaaa26... 100% 70 B
pulling c8472cd9daed... 100% 31 B
pulling fa956ab37b8c... 100% 98 B
pulling 6331358be52a... 100% 483 B
verifying sha256 digest
writing manifest
success
sunrise@ubuntu:~$
```

3. Use TinyLlama

3.1. Run TinyLlama

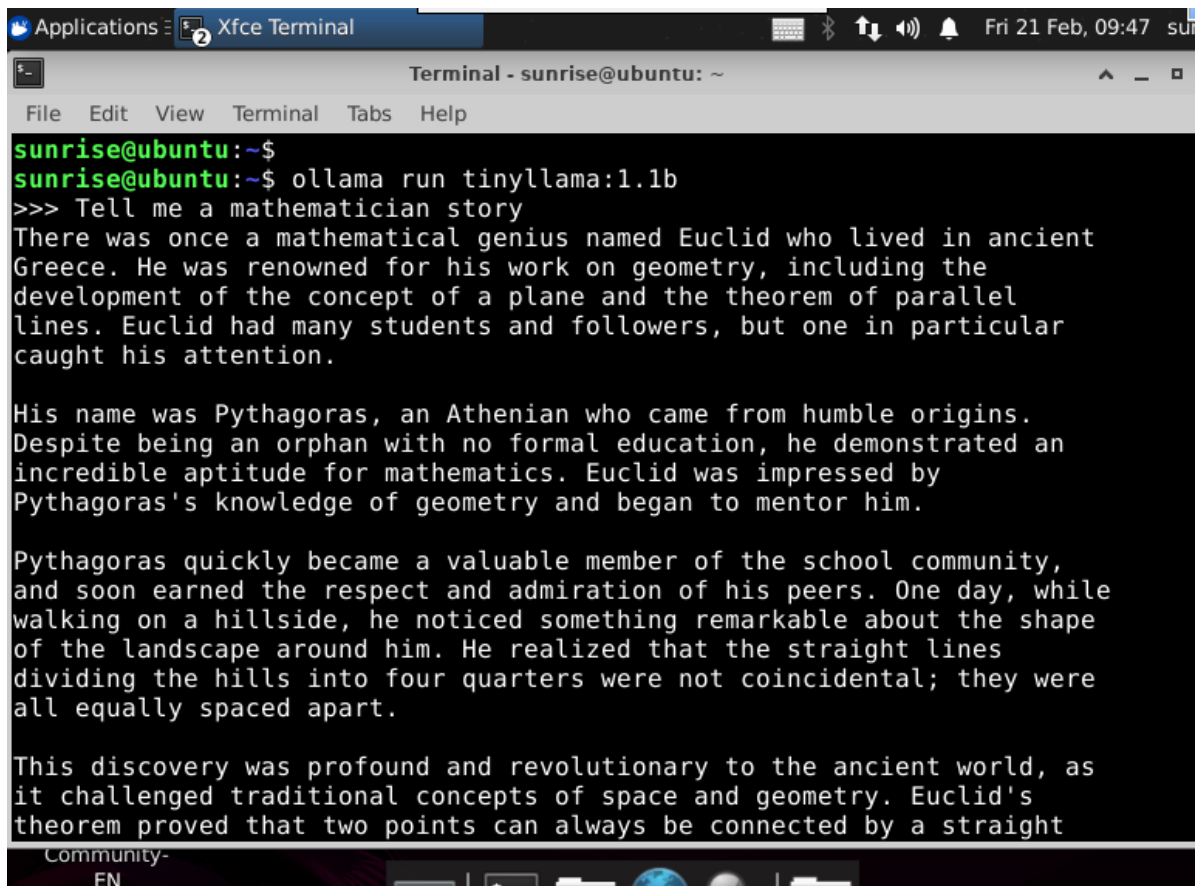
If the system does not have a running model, the system will automatically pull the TinyLlama 1.1B model and run it:

```
ollama run tinyllama:1.1b
```

3.2. Have a conversation

```
Tell me a mathematician story
```

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



The screenshot shows an Xfce Terminal window titled "Terminal - sunrise@ubuntu: ~". The terminal displays a conversation with the Ollama tinyllama model. The user prompts the model to tell a mathematician story, and the model responds with a story about Euclid and Pythagoras. The terminal window has a menu bar with "File", "Edit", "View", "Terminal", "Tabs", and "Help". The system bar at the top shows the date and time as "Fri 21 Feb, 09:47".

```
sunrise@ubuntu:~$  
sunrise@ubuntu:~$ ollama run tinyllama:1.1b  
>>> Tell me a mathematician story  
There was once a mathematical genius named Euclid who lived in ancient  
Greece. He was renowned for his work on geometry, including the  
development of the concept of a plane and the theorem of parallel  
lines. Euclid had many students and followers, but one in particular  
caught his attention.  
  
His name was Pythagoras, an Athenian who came from humble origins.  
Despite being an orphan with no formal education, he demonstrated an  
incredible aptitude for mathematics. Euclid was impressed by  
Pythagoras's knowledge of geometry and began to mentor him.  
  
Pythagoras quickly became a valuable member of the school community,  
and soon earned the respect and admiration of his peers. One day, while  
walking on a hillside, he noticed something remarkable about the shape  
of the landscape around him. He realized that the straight lines  
dividing the hills into four quarters were not coincidental; they were  
all equally spaced apart.  
  
This discovery was profound and revolutionary to the ancient world, as  
it challenged traditional concepts of space and geometry. Euclid's  
theorem proved that two points can always be connected by a straight
```

3.3. End the conversation

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

```
Terminal - sunrise@ubuntu: ~
File Edit View Terminal Tabs Help

This discovery was profound and revolutionary to the ancient
it challenged traditional concepts of space and geometry. E
theorem proved that two points can always be connected by a
line without intersecting or crossing each other, regardless
distance from one another.

Pythagoras taught his students this new theory and continued
it to everything he did in life. He learned to ride a horse
house, and conduct trade deals with faraway lands. Eventual
became an influential philosopher and political figure who
many of the Greeks to follow in his footsteps.

Euclid was fascinated by Pythagoras's unwavering dedication
and the way he applied his mathematical knowledge to everyda
a result, he spent years working with Pythagoras on practical
applications of geometry, using them to solve complex proble
fields like engineering and architecture.

In many ways, Euclid was more than just a brilliant mathemat
was a teacher, mentor, and lifelong learner who made an inde
impact on the world around him.

>>> /bye
sunrise@ubuntu:~$
```

References

Ollama

Website: <https://ollama.com/>

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

TinyLlama

GitHub: <https://github.com/jzhang38/TinyLlama>

Ollama model: <https://ollama.com/library/tinyllama>