# Gemma

#### **Gemma**

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References

Demo Environment

Development board: Jetson Orin series motherboard

**SSD**: 128G

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

Motherboard model	Run directly with Ollama	Run with Open WebUI
Jetson Orin NX 16GB	√	$\checkmark$
Jetson Orin NX 8GB	(need to run the small parameter version)	√ (need to run the small parameter version)
Jetson Orin Nano 8GB	(need to run the small parameter version)	√ (need to run the small parameter version)
Jetson Orin Nano 4GB	$\sqrt{\text{(need to run the small parameter version)}}$	√ (need to run the small parameter version)

Gemma is a new open model developed by Google and its DeepMind team.

# 1. Model scale

Model	Parameters
Gemma	2B
Gemma	7B

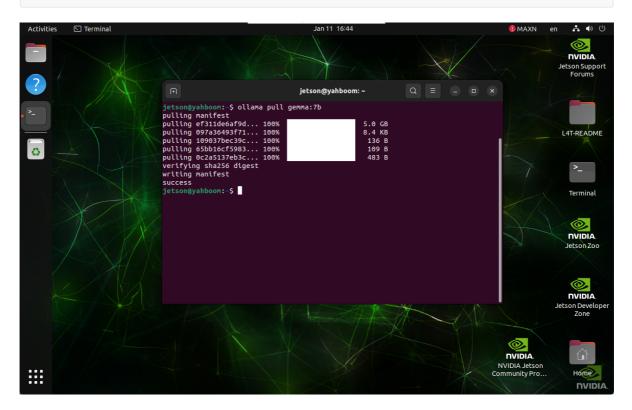
# 2. Pull Gemma

Use the pull command to automatically pull the model of the Ollama model library:

ollama pull gemma:7b

Small parameter version model: motherboards with 8G or less memory can run this

ollama pull gemma:2b



## 3. Use Gemma

#### 3.1. Run Gemma

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

```
ollama run gemma:7b
```

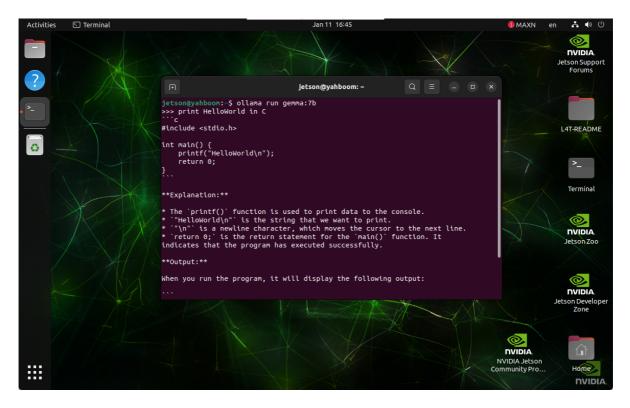
Small parameter version model: motherboards with 8G or less memory can run this

```
ollama run gemma:2b
```

### 3.2. Start a conversation

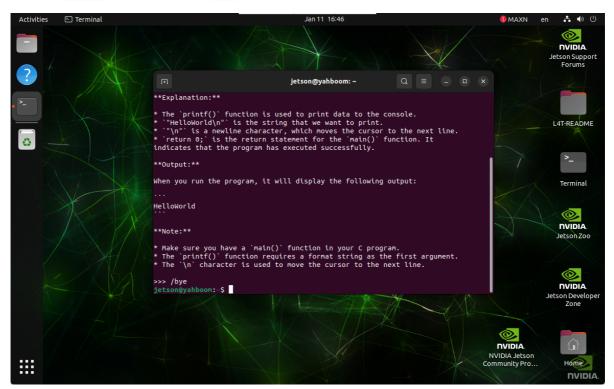
```
print HelloWorld in C
```

The time to reply to the question depends on the hardware configuration, please be patient!



#### 3.3. End the conversation

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



## References

Ollama

Official website: https://ollama.com/

GitHub: <a href="https://github.com/ollama/ollama">https://github.com/ollama/ollama</a>

Gemma

GitHub: <a href="https://github.com/google-deepmind/gemma">https://github.com/google-deepmind/gemma</a>

Ollama corresponding model: <u>https://ollama.com/library/gemma</u>