



## Documentation

## Prefilling

## Assistant Message Prefilling

When using Groq API, you can have more control over your model output by prefilling assistant messages. This technique gives you the ability to direct any text-to-text model powered by Groq to:

- Skip unnecessary introductions or preambles
- Enforce specific output formats (e.g., JSON, XML)
- Maintain consistency in conversations

## How to Prefill Assistant messages

To prefill, simply include your desired starting text in the assistant message and the model will generate a response starting with the assistant message.

**Note:** For some models, adding a newline after the prefill assistant message leads to better results.

**Tip:** Use the stop sequence (`stop`) parameter in combination with prefilling for even more concise results. We recommend using this for generating code snippets.

## Examples

### Example 1: Controlling output format for concise code snippets

When trying the below code, first try a request without the prefill and then follow up by trying another request with the prefill included to see the difference!

curl   JavaScript   Python   JSON

```
from groq import Groq

client = Groq()
completion = client.chat.completions.create(
    model="llama3-70b-8192",
    messages=[
        {
            "role": "user",
            "content": "Write a Python function to calculate the factorial of a number."
        },
        {
            "role": "assistant",
            "content": "```python"
        }
    ],
    stop="```",
)

for chunk in completion:
    print(chunk.choices[0].delta.content or "", end="")
```

### Example 2: Extracting structured data from unstructured input

curl   JavaScript   Python   JSON

```
from groq import Groq

client = Groq()
completion = client.chat.completions.create(
```

```
model="llama3-70b-8192",
messages=[
    {
        "role": "user",
        "content": "Extract the title, author, published date, and description from the following book as a JS
    },
    {
        "role": "assistant",
        "content": "```json"
    }
],
stop="```",
)

for chunk in completion:
    print(chunk.choices[0].delta.content or "", end="")
```