

Chat Mode

RAG Mode

?

Upload Data

Upload your data files:

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History_of_computer_an...
327.5KB

Parameters

Max Length

1024

82048

Temperature

0.70

0.001.00

Actions

New Chat

Clear History

Response Time (RAG): 23.42 seconds

CPU Usage (RAG): 5.40%

Memory Usage (RAG): 0.30%

Local Chatbot

A chatbot powered by LlamaIndex and Ollama

Hello, I'm your assistant, how can I help you?

9. In the context of CPU cache design, which of the following cache mapping policies would result in the highest hit rate but potentially the most expensive implementation? a) Direct mapping b) Set associative mapping c) Fully associative mapping d) Sequential mapping

The correct answer is (c) Fully associative mapping.

Fully associative mapping has the highest potential hit rate because it can store any block in any cache set, allowing for more efficient use of the cache. However, this comes at the cost of a more complex and expensive implementation, as each cache line needs to be searched to find a match.

Direct mapping (a) is simple but has a lower hit rate because blocks are always stored in the same location, making it less effective at reducing misses.

Set associative mapping (b) is a good compromise between performance and complexity. It allows for some flexibility in storing blocks while still being relatively simple to implement.

Sequential mapping (d) is not a common cache mapping policy, so I won't elaborate on it further!

Ask a question: