# 文章

A large language model (LLM) is a language model characterized by its large size. Their size is enabled by AI accelerators, which are able to process vast amounts of text data, mostly scraped from the Internet. The artificial neural networks which are built can contain from tens of millions and up to billions of weights and are (pre-)trained using self-supervised learning and semi-supervised learning. Transformer architecture contributed to faster training. Alternative architectures include the mixture of experts (MoE), which has been proposed by Google, starting with sparsely-gated ones in 2017, Gshard in 2021 to GLaM in 2022.

As language models, they work by taking an input text and repeatedly predicting the next token or word. Up to 2020, fine tuning was the only way a model could be adapted to be able to accomplish specific tasks. Larger sized models, such as GPT-3, however, can be prompt-engineered to achieve similar results. They are thought to acquire embodied knowledge about syntax, semantics and "ontology" inherent in human language corpora, but also inaccuracies and biases present in the corpora.

# 问题

Question 1:

What enables large language models to have a large size?

A. AI accelerators do not contribute to the large size of language models.

B. Large language models have a large size due to their ability to process small amounts of text data.

C. AI accelerators enable large language models to have a large size by processing vast amounts of text data, mostly scraped from the Internet.

D. The large size of language models is enabled by human knowledge input.

Question 2:

How are large language models trained?

A. Large language models are (pre-)trained using self-supervised learning and semi-supervised learning, with artificial neural networks built with tens of millions to billions of weights, mostly on text data scraped from the Internet, and the transformer architecture has contributed to faster training.

B. Large language models are trained using unsupervised learning and semi-supervised learning.

C. Large language models are trained using supervised learning and reinforcement learning.

D. Large language models are trained by manually inputting text data from the Internet.

Question 3:

What is the purpose of prompt-engineering for larger models like GPT-3?

A. The purpose of prompt-engineering for larger models like GPT-3 is to improve training efficiency.

B. Prompt-engineering is used in larger models like GPT-3 to reduce their size.

C. Prompt-engineering for larger models like GPT-3 aims to remove inaccuracies and biases in the corpora.

D. The purpose of prompt-engineering for larger models like GPT-3 is to achieve similar results to fine tuning and adapt the model to accomplish specific tasks.

Question 4:

What kind of knowledge do large language models acquire about human language corpora?

A. Large language models are thought to acquire embodied knowledge about syntax, semantics, and "ontology" inherent in human language corpora, as well as inaccuracies and biases present in the corpora.

B. Large language models acquire knowledge about the history of human language corpora.

C. Large language models acquire knowledge about mathematical equations from human language corpora.

D. Large language models acquire knowledge about cooking recipes from human language corpora.

Question 5:

Are large language models free from inaccuracies and biases present in the corpora?

A. No, large language models are not free from inaccuracies and biases present in the corpora.

B. Large language models have no inherent inaccuracies or biases from the corpora.

C. Large language models are completely free from inaccuracies and biases.

D. Inaccuracies and biases present in the corpora do not affect large language models.

# 答案

Question 1: C

Question 2: A

Question 3: D

Question 4: A

Question 5: A