

<https://learn.deeplearning.ai/chatgpt-prompt-eng/lesson/1/introduction>

Instruction Tuned LLM (Large Language Model)

Guide lines:

Principle of prompting:

1. To write clear and specific instruction

Clear is not short!

Tactic 1: Use delimiters to clearly indicate distinct parts of the input:

Summarize the text delimited by triple backticks ```{text}```

Tactic 2: Ask for a structured output

Generate a list of three made-up book titles along with their authors and genres.
Provide them in JSON format with the following keys: book_id, title, author, genre.

Tactic 3: Ask the model to check whether conditions are satisfied

If it contains a sequence of instructions, \
re-write those instructions in the following format:

Step 1 - ...

Step 2 - ...

...

Step N - ...

If the text does not contain a sequence of instructions, \
then simply write \"No steps provided.

Tactic 4: "Few-shot" prompting – give successful example of complete task, then ask model to perform the task

2. To give model time to think

Tactic 1: Specify the steps required to complete a task

Perform the following actions:

- 1 - Summarize the following text delimited by triple \
backticks with 1 sentence.
- 2 - Translate the summary into French.
- 3 - List each name in the French summary.
- 4 - Output a json object that contains the following \
keys: french_summary, num_names.

Separate your answers with line breaks.

Text:

```{text}```  
""""

Use the following format:

Text: <text to summarize>

Summary: <summary>

Translation: <summary translation>

Names: <list of names in Italian summary>

Output JSON: <json with summary and num\_names>

Tactic 2: Instruct the model to work out its own solution before rushing to a conclusion  
Determine if the student's solution is correct or not.

Your task is to determine if the student's solution \ is correct or not.

To solve the problem do the following:

- First, work out your own solution to the problem.
- Then compare your solution to the student's solution \ and evaluate if the student's solution is correct or not.

Don't decide if the student's solution is correct until you have done the problem yourself.

Model Limitations: Hallucinations

Makes statement that sounds plausible but are not true

Reducing Hallucinations:

First find the relevant information, then answer the question based on the relevant information

## Iterative Prompt Development:

### 1. Prompt guidelines

- Be clear and specific
- Analyze why result does not give desired output.
- Refine the idea and the prompt
- Repeat

Issue 1: The text is too long

Limit the number of words/sentences/characters. (Use at most xxx).

Issue 2. Text focuses on the wrong details

Ask it to focus on the aspects that are relevant to the intended audience. (The description is intended for xxx, so should be xxx and focus on xxx.)

Issue 3. Description needs a table of dimensions

Ask it to extract information and organize it in a table.

(After the description, include a table that gives the product's dimensions. The table should have two columns.

In the first column include the name of the dimension.  
In the second column include the measurements in inches only.

Give the table the title 'Product Dimensions'.

Format everything as HTML that can be used in a website.  
Place the description in a <div> element.)

2. Iterative Process
  - Try something
  - Analyze where the result does not give what you want
  - Clarify instructions, give more time to think
  - Refine prompts with a batch of examples

## Summarizing:

1. Summarize with a word/sentence/character limit:  
Your task is to generate a short summary of a product review from an ecommerce site.

Summarize the review below, delimited by triple  
backticks, in at most 30 words.

Review: ```{prod\_review}```

2. Summarize with a focus on shipping and delivery:  
focusing on any aspects that mention shipping and delivery of the product
3. Summarize with a focus on price and value:  
focusing on any aspects that are relevant to the price and perceived value
4. **Try "extract" instead of "summarize"**  
Your task is to extract relevant information from a product review from an ecommerce site to give feedback to the Shipping department.

From the review below, delimited by triple quotes extract the information relevant to shipping and delivery. Limit to 30 words.

5. **Summarize multiple product reviews**

## Inferring:

1. Sentiment (positive/negative):  
What is the sentiment of the following xxx
2. Identify types of emotions:  
Identify a list of emotions that the writer of the following review is expressing. Include no more than five items in the list. Format your answer as a list of lower-case words separated by commas
3. Identify anger:  
Is the writer of the following review expressing anger?The review is delimited with triple backticks. Give your answer as either yes or no
4. Extract product and company name from customer reviews  
Identify the following items from the review text:
  - Item purchased by reviewer
  - Company that made the item
5. Doing multiple tasks at once  
Format your response as a JSON object with "Sentiment", "Anger", "Item" and "Brand" as the keys. If the information isn't present, use "unknown" as the value.  
Make your response as short as possible.  
Format the Anger value as a boolean.
6. Inferring topics  
Determine five topics that are being discussed in the following text, which is delimited by triple backticks.  
Make each item one or two words long.  
Format your response as a list of items separated by commas.
7. Make a news alert for certain topics  
determine whether each item in the following list of topics is a topic in the text below, which is delimited with triple backticks.  
  
Give your answer as list with 0 or 1 for each topic.

## Transforming :

1. Translation  
Translate the following English text to Spanish  
Tell me which language this is  
Translate the following text to French and Spanish and English pirate:  
Translate formal and informal forms
2. Universal Translator

3. Tone Transformation

Translate the following from slang to a business letter

4. Format Conversion

```
data_json = { "restaurant employees" :[
 {"name":"Shyam", "email":"shyamjaiswal@gmail.com"},
 {"name":"Bob", "email":"bob32@gmail.com"},
 {"name":"Jai", "email":"jai87@gmail.com"}
]}
```

```
prompt = f"""
```

```
Translate the following python dictionary from JSON to an HTML \
table with column headers and title: {data_json}
"""
```

5. Spellcheck/Grammar check

Proofread and correct the following text and rewrite the corrected version. If you don't find any errors, just say "No errors found". Don't use any punctuation around the text

Proofread and correct this review. Make it more compelling.

Ensure it follows APA style guide and targets an advanced reader.

Output in markdown format

## Expanding:

1. Customize the automated reply to a customer email

You are a customer service AI assistant.

Your task is to send an email reply to a valued customer.

Given the customer email delimited by ``` , Generate a reply to thank the customer for their review.

If the sentiment is positive or neutral, thank them for their review.

If the sentiment is negative, apologize and suggest that they can reach out to customer service.

Make sure to use specific details from the review.

Write in a concise and professional tone.

Sign the email as `AI customer agent`.

Customer review: ```{review}```

Review sentiment: {sentiment}

2. Remind the model to use details from the customer's email

You are a customer service AI assistant.

Your task is to send an email reply to a valued customer.

Given the customer email delimited by ``` , \

Generate a reply to thank the customer for their review.

If the sentiment is positive or neutral, thank them for their review.

If the sentiment is negative, apologize and suggest that they can reach out to customer service.

Make sure to use specific details from the review.

Write in a concise and professional tone.

Sign the email as `AI customer agent`.

Customer review: ``{review}```

Review sentiment: {sentiment}