Zero-shot Prompts

SST-2

- Standard Prompting: For the sentence: "[sentence]", is the sentiment in this sentence positive or negative? Exclude the neutral case. Provide the answer in your final response as "The sentiment is {} (positive / negative)".

- Chain-of-thought Prompting: For the sentence: "[sentence]", is the sentiment in this sentence positive or negative? Exclude the neutral case. Answer the question step by step. Provide the answer in your final response as "The sentiment is {} (positive / negative)".

- Metacognitive Prompting: For the sentence: "[sentence]", is the sentiment in this sentence positive or negative? Exclude the neutral case. As you perform this task, follow these steps:

    1. Clarify your understanding of the sentence.
    2. Make a preliminary identification of the sentiment of the given text.
    3. Critically assess your preliminary analysis. If you feel unsure about your initial sentiment classification, try to reassess it.
    4. Confirm your final answer and explain the reasoning behind your choice.
    5. Evaluate your confidence (0-100%) in your analysis and provide an explanation for this confidence level.

    Provide the answer in your final response as "The sentiment is {} (positive / negative)".

WNLI / RTE

- Standard Prompting: For the sentence pair, sentence 1: "[sentence_1]" and sentence 2: "[sentence_2]", determine if sentence 2 is entailed by sentence 1. Provide the answer in your final response as "The entailment status is {} (entailment / not_entailment)".

- Chain-of-thought Prompting: For the sentence pair, sentence 1: "[sentence_1]" and sentence 2: "[sentence_2]", determine if sentence 2 is entailed by sentence 1. Answer the question step by step. Provide the answer in your final response as "The entailment status is {} (entailment / not_entailment)".

- Metacognitive Prompting: For the sentence pair, sentence 1: "[sentence_1]" and sentence 2: "[sentence_2]", determine if sentence 2 is entailed by sentence 1. As you perform this task, follow these steps:

    1. Clarify your understanding of both sentences.
    2. Make a preliminary identification of the entailment of the given sentence pair.
    3. Critically assess your preliminary analysis. If you feel unsure about your initial entailment classification, try to reassess it.
    4. Confirm your final answer and explain the reasoning behind your choice.

5. Evaluate your confidence (0-100%) in your analysis and provide an explanation for this confidence level.

Provide the answer in your final response as "The entailment status is {} (entailment / not_entailment)".

COPA

- Standard Prompting: Given the premise: "[sentence]", which of the following is the most plausible effect / cause? Choice 1: "[choice_1]", Choice 2: "[choice_2]". Provide the answer in your final response as "The most plausible effect / cause is {} (Choice 1 / Choice 2)".
- Chain-of-thought Prompting: Given the premise: "[sentence]", which of the following is the most plausible effect / cause? Choice 1: "[choice_1]", Choice 2: "[choice_2]". Answer the question step by step. Provide the answer in your final response as "The most plausible effect / cause is {} (Choice 1 / Choice 2)".
- Metacognitive Prompting: Given the premise: "[sentence]", which of the following is the most plausible effect / cause? Choice 1: "[choice_1]", Choice 2: "[choice_2]". As you perform this task, follow these steps:
    1. Clarify your understanding of the premise and both choices.
    2. Make a preliminary identification of which choice is the most plausible effect / cause of the premise.
    3. Critically assess your preliminary analysis. If you feel unsure about your initial choice, try to reassess it.
    4. Confirm your final answer and explain the reasoning behind your choice.
    5. Evaluate your confidence (0-100%) in your analysis and provide an explanation for this confidence level.

    Provide the answer in your final response as "The most plausible effect / cause is {} (Choice 1 / Choice 2)".

WiC

- Standard Prompting: In two sentences, sentence 1: "[sentence_1]" and sentence 2: "[sentence_2]", both contain the target word "[word]". Determine if the target word is used with the same meaning in both sentences. Provide the answer in your final response as "The target word has the same meaning in both sentences: {} (True / False)".
- Chain-of-thought Prompting: In two sentences, sentence 1: "[sentence_1]" and sentence 2: "[sentence_2]", both contain the target word "[word]". Determine if the target word is used with the same meaning in both sentences. Answer the question step by step.

Provide the answer in your final response as "The target word has the same meaning in both sentences: {} (True / False)".

- Metacognitive Prompting: In two sentences, sentence 1: "[sentence_1]" and sentence 2: "[sentence_2]", both contain the target word "[word]". Determine if the target word is used with the same meaning in both sentences. As you perform this task, follow these steps:
  1. Understand the context and meaning of the target word in both sentences.
  2. Make a preliminary judgment on whether the target word has the same meaning in both sentences.
  3. Critically assess your preliminary analysis. If you are unsure about your initial judgment, reassess it.
  4. Confirm your final answer and explain the reasoning behind your decision.
  5. Evaluate your confidence (0-100%) in your analysis and provide an explanation for this confidence level.

Provide the answer in your final response as "The target word has the same meaning in both sentences: {} (True / False)".

WSC

- Standard Prompting: Given the text: "[passage]", determine if the term "[span2_text]" (at position [span2_index]) refers to "[span1_text]" (at position [span1_index]). Provide the answer in your final response as ""[span2_text]" refers to "[span1_text]": {} (True / False)".

- Chain-of-thought Prompting: Given the text: "[passage]", determine if the term "[span2_text]" (at position [span2_index]) refers to "[span1_text]" (at position [span1_index]). Answer the question step by step. Provide the answer in your final response as ""[span2_text]" refers to "[span1_text]": {} (True / False)".

- Metacognitive Prompting: Given the text: "[passage]", determine if the term "[span2_text]" (at position [span2_index]) refers to "[span1_text]" (at position [span1_index]). As you perform this task, follow these steps:
  1. Understand the text and consider the reference relationship between "[span2_text]" and "[span1_text]".
  2. Make a preliminary judgment on whether "[span2_text]" refers to "[span1_text]".
  3. Critically assess your preliminary analysis. If you are unsure about your initial judgment, reassess it.
  4. Confirm your final answer and explain the reasoning behind your decision.
  5. Evaluate your confidence (0-100%) in your analysis and provide an explanation for this confidence level.

Provide the answer in your final response as ""[span2_text]" refers to "[span1_text]": {} (True / False)".

QNLI

- **Standard Prompting:** For the question: "[question]" and statement: "[sentence]", determine if the statement provides the answer to the question. If the statement contains the answer to the question, the status is entailment. If it does not, the status is not_entailment. Provide the answer in your final response as "The entailment status is {} (entailment / not_entailment)".
- **Chain-of-thought Prompting:** For the question: "[question]" and statement: "[sentence]", determine if the statement provides the answer to the question. If the statement contains the answer to the question, the status is entailment. If it does not, the status is not_entailment. Answer the question step by step. Provide the answer in your final response as "The entailment status is {} (entailment / not_entailment)".
- **Metacognitive Prompting:** For the question: "[question]" and statement: "[sentence]", determine if the statement provides the answer to the question. If the statement contains the answer to the question, the status is entailment. If it does not, the status is not_entailment. As you perform this task, follow these steps:
     1. Clarify your understanding of the question and the context sentence.
     2. Make a preliminary identification of whether the context sentence contains the answer to the question.
     3. Critically assess your preliminary analysis. If you feel unsure about your initial entailment classification, try to reassess it.
     4. Confirm your final answer and explain the reasoning behind your choice.
     5. Evaluate your confidence (0-100%) in your analysis and provide an explanation for this confidence level.
  Provide the answer in your final response as "The entailment status is {} (entailment / not_entailment)".

STS-B

- **Standard Prompting:** Assess the similarity between the following two sentences: "[sentence_1]" and "[sentence_2]". The score should be ranging from 0.0 (no relation) to 5.0 (high similarity), and can be a decimal. Provide the answer in your final response as "The similarity score is {}".
- **Chain-of-thought Prompting:** Assess the similarity between the following two sentences: "[sentence_1]" and "[sentence_2]". The score should be ranging from 0.0 (no

relation) to 5.0 (high similarity), and can be a decimal. Answer the question step by step. Provide the answer in your final response as "The similarity score is {}".

- Metacognitive Prompting: Assess the similarity between the following two sentences: "[sentence_1]" and "[sentence_2]". The score should be ranging from 0.0 (no relation) to 5.0 (high similarity), and can be a decimal. As you perform this task, follow these steps:
  > 1. Clarify your understanding of both sentences.
  > 2. Make a preliminary identification of similarity based on subject matter, context, and semantic contents.
  > 3. Critically assess your preliminary analysis. If you feel unsure about your initial similarity score, try to reassess it.
  > 4. Confirm your final similarity score and provide the reasoning for your decision.
  > 5. Evaluate your confidence (0-100%) in your analysis and provide an explanation for this confidence level.

  Provide the answer in your final response as "The similarity score is {}".

QQP

- Standard Prompting: For the question pair, question 1: "[question_1]" and question 2: "[question_2]", determine if the two questions are paraphrases of each other. Provide the answer in your final response as "The paraphrase status is {} (paraphrase / not_paraphrase)".
- Chain-of-thought Prompting: For the question pair, question 1: "[question_1]" and question 2: "[question_2]", determine if the two questions are paraphrases of each other. Answer the question step by step. Provide the answer in your final response as "The paraphrase status is {} (paraphrase / not_paraphrase)".
- Metacognitive Prompting: For the question pair, question 1: "[question_1]" and question 2: "[question_2]", determine if the two questions are paraphrases of each other. As you perform this task, follow these steps:
  > 1. Clarify your understanding of both questions.
  > 2. Make a preliminary identification of similarity based on subject matter, context, and semantic contents.
  > 3. Critically assess your preliminary analysis. If you are unsure about the initial assessment of the questions being paraphrases, try to reassess it.
  > 4. Confirm your final decision on whether the questions are paraphrases or not and provide the reasoning for your decision.
  > 5. Evaluate your confidence (0-100%) in your analysis and provide an explanation for this confidence level.

Provide the answer in your final response as "The paraphrase status is {} (paraphrase / not_paraphrase)".

CB

- Standard Prompting: Consider a premise: "[sentence]" and a hypothesis: "[sentence]". Based on the premise, determine whether the hypothesis is entailed, contradicted, or neutral. Provide the answer in your final response as "The entailment status is {} (entailment / contradiction / neutral)".
- Chain-of-thought Prompting: Consider a premise: "[sentence]" and a hypothesis: "[sentence]". Based on the premise, determine whether the hypothesis is entailed, contradicted, or neutral. Answer the question step by step. Provide the answer in your final response as "The entailment status is {} (entailment / contradiction / neutral)".
- Metacognitive Prompting: Consider a premise: "[sentence]" and a hypothesis: "[sentence]". Based on the premise, determine whether the hypothesis is entailed, contradicted, or neutral. As you perform this task, follow these steps:

    1. Clarify your understanding of the premise and the hypothesis.
    2. Make a preliminary identification of whether the premise entails, contradicts, or is neutral to the hypothesis.
    3. Critically assess your preliminary judgment. If you feel unsure about your initial entailment classification, try to reassess it.
    4. Confirm your final answer and explain the reasoning behind your choice.
    5. Evaluate your confidence (0-100%) in your analysis and provide an explanation for this confidence level.

    Provide the answer in your final response as "The entailment status is {} (entailment / contradiction / neutral)".