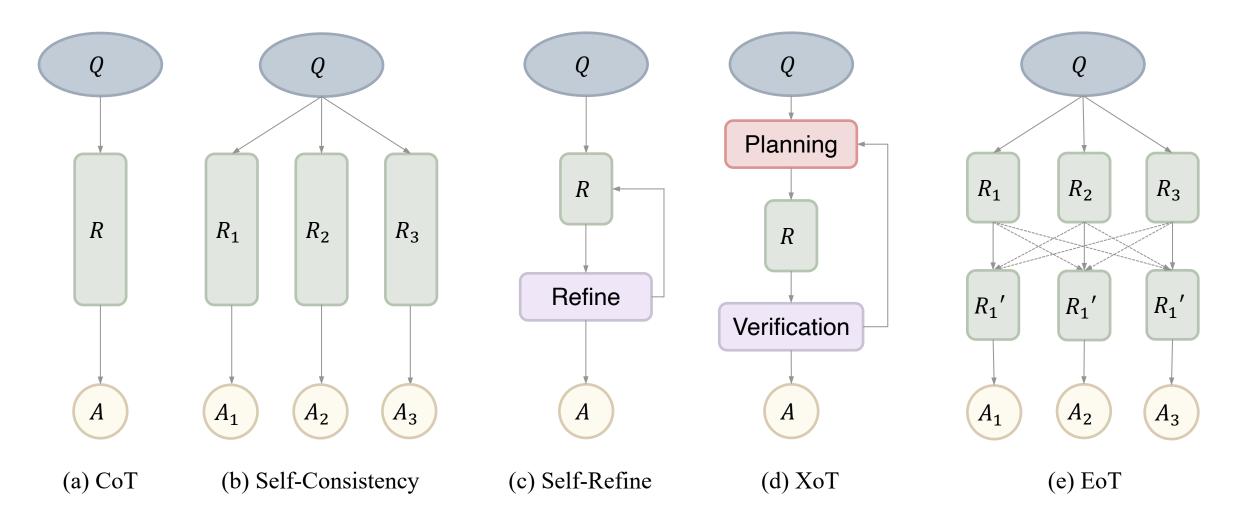


Exchange-of-Thought: Enhancing Large Language Model Capabilities through Cross-Model Communication

EMNLP 2023

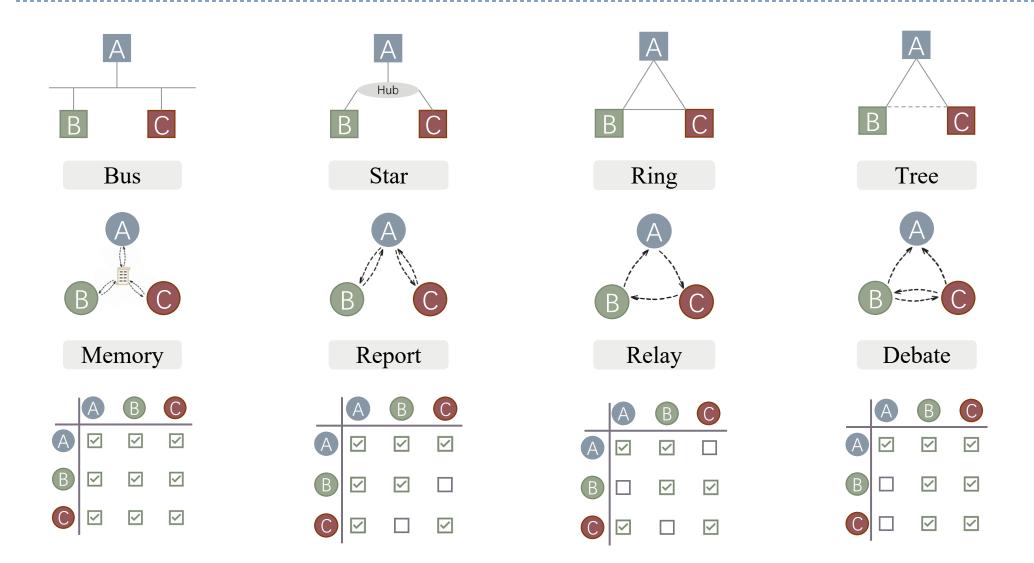
Background: Devoid of External Insights





EoT: Communication Mode





EoT: Confidence Evaluation & Termination Condition



Question: Twenty dozen cups cost \$1200 less than the total cost of half a dozen plates sold at \$6000 each. Calculate the total cost of buying each cup.

Turn 1: 20 dozen cups are equivalent to $20 \times 12 = 240 \text{ cups...}$ The answer is \$70.

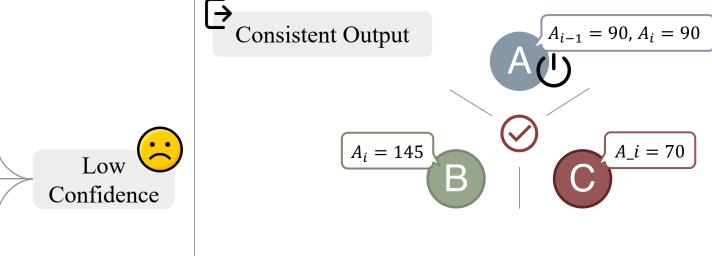
Turn 2: One dozen is equal to 12, so 20 dozen cups is $20 \times 12 = 240 \text{ cups...A's solution is accurate. So, the total cost is <math>145 .

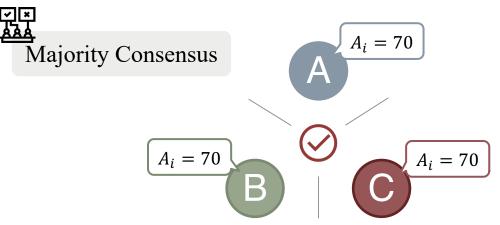
Turn3: Let's first convert 20 dozen cups to a total number of cups: $20 \times 12 = 240$ cups, ... Therefore, the total cost of buying each cup is 90 dollars.

Turn 1: First, we need to convert 20 dozen cups to the total number of cups...Dividing both sides by 240: x = \$70 Therefore, the total cost is \$70.

Turn 2: Both A and B have provided their solutions....Dividing both sides by 240: c = \$70. So, the cost of buying each cup is \$70.

Turn3: Based on the solutions provided by A and B... $240x = $18000 - $1200 \ 240x = $16800 \ x = 70 So each cup costs \$70.



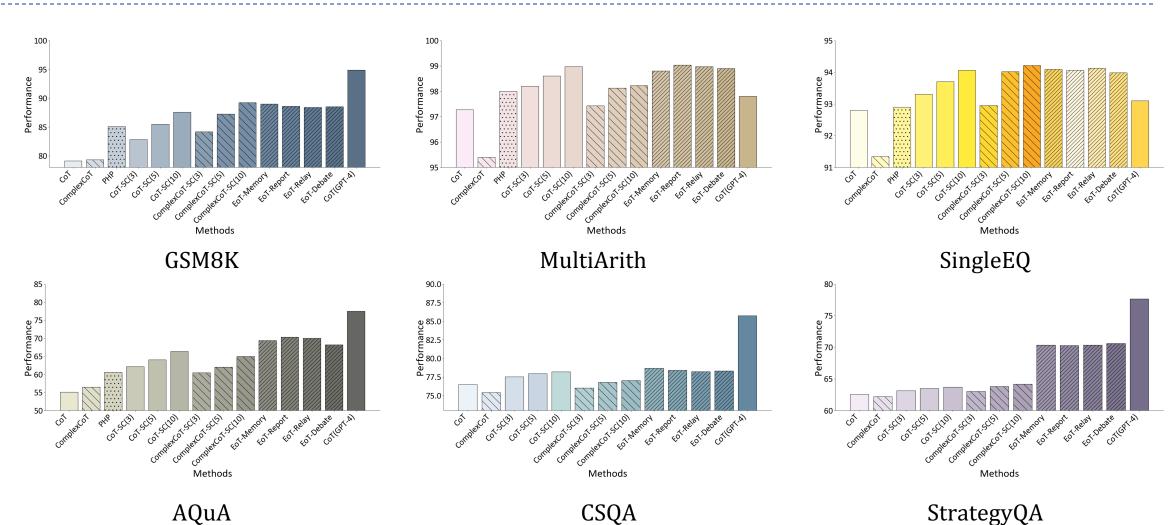


High C

Confidence

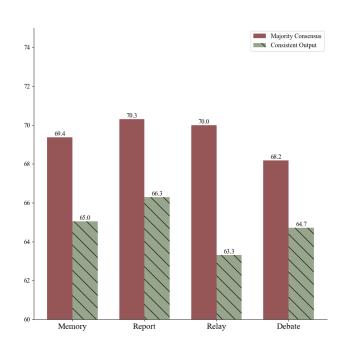
Experiment Results



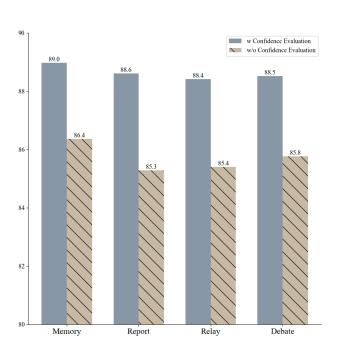


Analysis

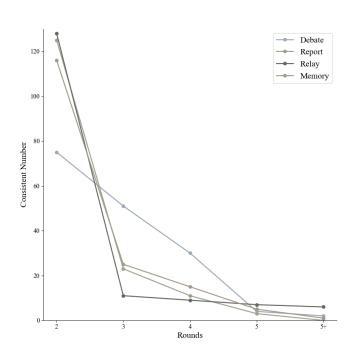




Confidence Evaluation on AQuA



Termination Condition on GSM8K



Round Analysis on SVAMP



Thank you!