
Concept-to-text in context learning prompt for LLM's self-feedback:

We want to create a sentence that contains all the specified concepts. Please provide feedback on the following sentences. The feedback should list all missing concepts. If all concepts are covered, output 'all covered'

Concepts: ['dog', 'frisbee', 'catch', 'throw']

Generated Sentence: A dog leaps to catch a thrown frisbee.

Feedback: all covered

Concepts: ['dog', 'frisbee', 'catch', 'throw']

Generated Sentence: Two dogs are throwing frisbees at each other .

Feedback: ['catch']

Concepts: ['vest', 'snow', 'remove', 'silhouette', 'dunk', 'step', 'item', 'toddler', 'plaster', 'wall', 'piece', 'tool', 'circle', 'pull', 'wrap', 'headphone', 'deck', 'suit', 'press', 'mother', 'pit', 'cupcake', 'priest', 'rink', 'counter', 'rest', 'piano', 'wine', 'serve', 'winter']

Generated Sentence: In the winter, the toddler wearing a vest, pressed a piece of wet plaster against the wall in a circle, while his mother baking a cupcake was removing the snow from the deck with a tool; switching steps to the rhythm of a piano piece echoing from the headphones wrapped around her neck, she caught a glimpse of the priest serving wine, his silhouette dunking a cupcake into a pit at the rink counter, under the restful gaze of a suit-clad man.

Feedback:

Output for Concept-to-Text feedback:

all covered

Table 13: This is the in-context learning (ICL) concept-to-text prompt (two ICL examples) we used to generate LLM's self-feedback at CommonGen Hard. This example contains the self-feedback from GPT-4.

Concept-to-text prompt for LLM's refinement:

Concepts: ['fruit', 'motorcycle', 'perform', 'jacket', 'vehicle', 'place', 'mat', 'walk', 'world', 'area', 'kiss', 'mother', 'pass', 'report', 'club', 'axis', 'tricep', 'patient', 'listen', 'owner', 'uniform', 'floor', 'hamburger', 'use', 'wine', 'cross', 'bull', 'sell', 'lawn', 'friend']

Generated sentence: In a world where a fruit can perform like a motorcycle, I found my mother wearing a leather jacket, passing by her vehicle to walk towards the place where she runs a club. Not far from that area, my friend, a patient person, was ready to sell mats, used for gym workouts, especially for triceps. Being the owner of the shop, he always wears a uniform. While I was listening to this report, sitting cross-legged on the floor and munching my hamburger, I missed seeing a bull wandering on the lawn just outside. Just then, I received an unexpected kiss from my wife who brought me a glass of wine from our cellar which also acts as an axis for all the happenings of my life.

Missing Concepts: ['use', 'lawn']

Please revise generated sentence which covers all missing concepts and all given concepts, with the exact string matches.
New sentence:

Output for Concept-to-Text refinement:

In a world where a fruit can perform like a motorcycle, I found my mother wearing a leather jacket, passing by her vehicle to walk towards the place where she runs a club. Not far from that area, my friend, a patient person, was ready to sell mats, used for gym workouts, especially for triceps. Being the owner of the shop, he always wears a uniform. While I was listening to this report, sitting cross-legged on the floor and munching my hamburger, I missed seeing a bull wandering on the lawn just outside. Just then, I received an unexpected kiss from my wife who brought me a glass of wine from our cellar which also acts as an axis for all the happenings of my life.

Table 14: This is the concept-to-text refinement prompt we used to generate LLM's refinement at CommonGen Hard. This example contains the refinement from GPT-4.