# Reverse Prompt Engineering

Reverse engineering is the art of building things backward — and you can use it on prompts.

Instead of writing a prompt to generate a response, start with a high-quality version of the desired response and work your way back to a prompt.

Another way to highlight the difference between classic prompting and reverse prompt engineering is to turn each technique into a question.

* Traditional prompting: “Here are the directions. Can you get me there?”
* Reverse-Engineered prompting: “Here’s the destination I want to reach. Can you show me the directions to get there?”

This method shines in two situations. The first is when seek inspiration to write your prompt. The second is when your goal is to generate output with very specific formats — like a board game, a landing page, or a recipe. Let’s explore an example involving the latter.

**[Example of Reverse Prompt Engineering]**  
  
Hey ChatGPT, I'll give you a recipe and you'll kindly help me write a prompt that can generate such a recipe.  
  
**Desired output:**  
  
"Balsamic Glazed Portobello Mushroom and Quinoa Stuffed Bell Peppers.  
  
 Ingredients:  
 - 2 large bell peppers (any color)  
 - 2 portobello mushrooms, diced  
 - 1 cup cooked quinoa  
 - 1 small red onion, diced  
 - 2 cloves garlic, minced  
 - 1/2 cup cherry tomatoes, halved  
 - 1/4 cup fresh basil, chopped  
 - 1/4 cup balsamic vinegar  
 - 2 tablespoons olive oil Salt and black pepper, to taste  
 - 1/2 cup shredded mozzarella cheese (optional, for a vegetarian touch)  
 - 1/4 cup grated Parmesan cheese (optional, for a vegetarian touch)  
  
Note from the chef: In this dish, the robust flavors of the balsamic-glazed portobello mushrooms and quinoa meld seamlessly with the sweetness of bell peppers. The optional addition of mozzarella and Parmesan cheeses adds a delightful creaminess that makes this meal truly unforgettable.  
  
Instructions:  
 - Preheat the oven to 375°F (190°C) and lightly grease a baking dish or tray.  
 - Cut the bell peppers in half lengthwise and remove the seeds and membranes. Place the pepper halves cut-side-up in the prepared baking dish.  
 - In a large skillet, heat 1 tablespoon of olive oil over medium heat. Add the diced red onion and cook until softened, about 3-4 minutes. Add the minced garlic and cook for an additional 1-2 minutes, until fragrant.  
 - Stir in the diced portobello mushrooms and cook for about 5-7 minutes, until they release their moisture and begin to brown. Add the halved cherry tomatoes and cook for another 2-3 minutes.  
 - In a small saucepan, combine the balsamic vinegar and remaining 1 tablespoon of olive oil. Simmer over low heat until the mixture thickens and reduces slightly, about 5 minutes.  
 - Add the cooked quinoa, chopped fresh basil, and balsamic glaze to the skillet with the mushroom mixture. Stir well to combine and season with salt and black pepper to taste.  
 - Carefully spoon the quinoa and mushroom mixture into the bell pepper halves, dividing it evenly among them. Top each stuffed pepper with shredded mozzarella and grated Parmesan cheese, if desired.  
 - Bake the stuffed peppers in the preheated oven for 25-30 minutes, or until the peppers are tender and the cheese is melted and bubbly.  
 - Remove the stuffed peppers from the oven and let them cool for a few minutes before serving. Garnish with additional fresh basil, if desired. Enjoy your exquisite Balsamic Glazed Portobello Mushroom and Quinoa Stuffed Bell Peppers!"  
  
**Prompt:**