# Ex.No.10 Content Creation (Reports, Articles, Case Studies, etc.) Using Prompt Patterns

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## Aim:

To demonstrate how various prompting techniques (query decomposition, decision-making, semantic filtering, etc.) can be employed to create content such as reports, articles, case studies, or creative works like comic books, using ChatGPT or similar models. The objective is to highlight how different prompt structures affect the content's quality, coherence, and structure.

## **Procedure:**

- 1. Introduction to Prompt Patterns: Begin by understanding the following prompt patterns: O Query Decomposition: Breaking down complex queries into smaller, actionable parts. O Decision Making: Asking the model to choose between options or directions. O Answer Engineering: Refining outputs by giving detailed instructions on how to structure or format the answer. O Fact Check List: Ensuring the content is factually accurate, especially for reports or case studies. O Tail Generation: Extending the content logically to create depth in storytelling or analysis. O Menu Actions: Presenting multiple action choices and guiding the AI to select one. O Semantic Filter: Applying filters to control the tone, style, and accuracy of the content.
- 2. Choosing the Content Type: Decide on the type of content you want to create. This could be: Reports (e.g., industry analysis, sustainability reports, etc.) Case Studies (e.g., business solutions, technological innovations) Articles (e.g., opinion pieces, educational articles) Creative Content (e.g., comic book story, short stories, video scripts)
- 3. For example, you could choose a business report on market trends, a case study on a successful startup, or even a story-based prompt like creating a fictional world for a comic.
- 4. Creating the Prompts: O Start with simple prompts to generate initial content. O Gradually refine the prompts, moving toward more complex techniques like decision-

- making (asking the model to pick one of several options), tail generation (extending the narrative), and semantic filtering (adjusting style or tone).
- 5. Generating and Refining Outputs: Use the model to generate initial drafts, and then refine the outputs using iterative adjustments: O For a report, prompt the model with basic data, then ask for a deeper analysis and insights. O For creative content, refine the initial story idea with specific details on characters, settings, or actions.
- 6. Review and Evaluation: After generating content, evaluate the outputs for: Coherence: Is the generated content logical and structured? Creativity/Originality: Is the content engaging and fresh? Accuracy: Is the content factually accurate (for reports and case studies)? Tone and Style: Does the content match the intended tone (formal, creative, educational)?

Test Case Scenarios for Content Generation: (USE ANY 2) content generation scenarios:

- 1. Business Report on Market Trends
- 2. Case Study on Business Success
- 3. Article on Climate Change
- 4. Creative Writing Sci-Fi Short Story
- 5. Educational Report on Renewable Energy
- 6. Product Launch Announcement
- 7. Travel Blog Post
- 8. Research Paper on Artificial Intelligence
- 9. Interview Transcript for Documentary
- 10. Sustainability Practices in Fashion
- 11. How to Build an E-commerce Website
- 12. Social Issue Awareness Campaign
- 13. Artificial Intelligence Impact on Healthcare

# **Prompt Engineering Techniques Used:**

Technique	Description		
Query Decomposition	Break a broad content request into smaller, manageable parts for detailed responses.		
Decision-making Prompts	Use prompts that guide the AI to choose between two or more alternatives.		
Semantic Filtering	Add constraints or guidance on the audience, tone, or type of language to be used.		

Technique	Description		
Stepwise Prompting	Build content section-by-section for better control and cohesion.		
Iterative Refinement	Rework or refine drafts with focused follow-up prompts.		

## **Use Case Demonstrations:**

## **Example 1: Case Study (Using Query Decomposition)**

## **Prompt Used:**

"Write a case study about how a local bakery increased its customer base by using Instagram marketing. Include business background, initial problem, strategy adopted, and measurable results."

## **Output Summary:**

- Well-structured case study with distinct sections.
- Each part had clarity due to segmented prompting.

## **Resulting Headings:**

- Background
- Problem Faced
- Strategy Implemented
- Outcome & Metrics
- Lessons Learned

# **Example 2: Article Writing (Semantic Filtering + Tone Guidance)**

#### **Prompt Used:**

"Write an 800-word article for college students on how to avoid burnout during exams. Keep the tone casual and friendly. Use simple language."

#### Impact:

- Al kept the style conversational.
- Included relatable examples and short paragraphs.
- Better engagement due to semantic filtering.

#### **Section Flow:**

- 1. Introduction to Exam Stress
- 2. Recognizing Early Signs of Burnout

- 3. Practical Tips (e.g., Pomodoro Technique, Breaks)
- 4. Importance of Sleep and Diet
- 5. Conclusion with Encouragement

# **Example 3: Comic Script (Decision-making + Creative Structure)**

### **Prompt Used:**

"Create a short 4-panel comic script about a robot trying to understand human jokes. Should it be humorous or emotional?"

## Al Decision Making Interaction:

- Al asked for tone preference.
- Chose: Humorous.

#### **Comic Panels Script:**

Panel	Description
1	Robot reading: "How to Understand Jokes"
2	Tries a joke: "Why did the computer cross the road? To update its drivers!"
3	Pauses Self-diagnostic confusion
4	Laughs mechanically: "Ha. Ha. I am hilarious." <i>Crashes</i>

# **Procedure:**

- 1. **Select Content Type:** Decide whether the output should be an article, report, comic script, blog, or case study.
- 2. **Define the Purpose & Audience:** Clarify the context, target readers, and goal of the content.
- 3. Choose a Prompting Strategy:
  - Break down the request (query decomposition)
  - Use specific constraints (semantic filtering)
  - Offer choices (decision-based)
- 4. **Generate Content using ChatGPT:** Input your prompt with clarity and formatting instructions.
- 5. **Iteratively Refine:** Use follow-ups like "expand the conclusion" or "make tone more friendly."
- 6. **Polish the Output:** Use editing tools like Grammarly.

7. Format and Export: Finalize the content in a document editor.

# **Prompt Structure Comparison Table:**

Prompt Type	Structure Quality	Coherence	Creativity	Ideal Use Cases
Simple Prompt	Moderate	Low	Low	Quick answers
Query Decomposition	High	High	Medium	Reports, Case Studies
Decision-Making Prompt	Medium	Medium	High	Creative Writing
Semantic Filtering	High	High	Medium	Articles, Blogs
Iterative Refinement	Very High	Very High	High	All content types

# **Conclusion:**

By applying various prompting techniques, you can generate high-quality content for a wide range of use cases, from business reports and case studies to creative works like short stories and articles. This experiment demonstrates how structured prompting can guide AI models like ChatGPT to create coherent, accurate, and engaging outputs tailored to specific needs.

# **Result:**

The experiment validates that using prompt patterns strategically enhances the **depth**, **structure**, **engagement**, **and quality** of AI-generated content. Prompt engineering is essential for content creators aiming to achieve professional results using AI tools.