

EX NO : 10 CONTENT CREATION (REPORTS, ARTICLES, CASE STUDIES, ETC.) USING PROMPT PATTERNS

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AIM:

To demonstrate how prompting techniques such as query decomposition, decision-making, semantic filtering, and answer engineering can be applied to generate high-quality content like reports, case studies, or stories using ChatGPT or similar AI tools.

TOOLS USED:

- ChatGPT (AI language model)
- Prompt Engineering Techniques:
 - Query Decomposition
 - Decision-Making
 - Tail Generation
 - Semantic Filtering
 - Answer Engineering

PROCEDURE:

1. STUDIED PROMPT PATTERNS:

Understood key prompting strategies:

- Breaking queries into parts (Query Decomposition)
- Using choices (Decision-Making)
- Refining tone and detail (Semantic Filtering & Answer Engineering)

- Extending storylines (Tail Generation)
- 2. **SELECTED CONTENT SCENARIOS:**
 - Scenario 1: **Case Study on Business Success (Zerodha)**
 - Scenario 2: **Creative Writing – Sci-Fi Short Story (AI and Mars Colony)**
- 3. **CREATED INITIAL PROMPTS:**

Started with simple prompts to generate a basic version.
- 4. **REFINED PROMPTS USING TECHNIQUES:**

Gradually added complexity and detail using advanced prompting techniques.
- 5. **GENERATED MULTIPLE DRAFTS:**

Compared initial and refined outputs to observe the impact of prompting.
- 6. **EVALUATED & FINALIZED:**

Reviewed the content for coherence, creativity, tone, and structure.

SCENARIO 1: CASE STUDY ON BUSINESS SUCCESS – ZERODHA

First Draft Prompt (Basic):

“Write a case study about Zerodha's business success.”

First Draft Output:

Zerodha is an Indian fintech company founded in 2010 by Nithin Kamath. It disrupted the brokerage industry by offering zero-commission trading. Its business model focused on technology-driven platforms and direct customer acquisition. As of 2023, Zerodha serves over 10 million users and is considered one of the most profitable fintech firms in India.

Refined Prompt (Using Decision-Making + Answer Engineering):

“Write a structured case study on Zerodha’s success using the following format:

- Background
 - Problem Statement
 - Innovative Solution
 - Business Model
 - Growth Metrics
 - Key Takeaways
- Also, maintain a formal tone and include real facts.”

Refined Output:

Case Study: Zerodha – Revolutionizing Indian Stock Trading

1. Background:

Founded in 2010 by Nithin and Nikhil Kamath, Zerodha aimed to simplify trading for retail investors in India.

2. Problem Statement:

High brokerage fees and lack of digital-friendly platforms discouraged retail participation in stock trading.

3. Innovative Solution:

Zerodha introduced a zero-commission model with its in-house tech platform “Kite.” This offered a user-friendly interface, powerful charting tools, and seamless trading.

4. Business Model:

- Zero brokerage on equity delivery
- Flat ₹20 per intraday/F&O trade
- Revenue from premium APIs and educational tools (Varsity, Rainmatter)

5. Growth Metrics:

- 10+ million users
- Daily trading volume of over ₹1.5 lakh crore

- Profitable since 2017, with ₹2000+ crore PAT (2022–23)

6. Key Takeaways:

- Customer-first, tech-led disruption
- Simplified pricing drove massive user growth
- Education and open innovation (Rainmatter) enhanced brand trust

SCENARIO 2: CREATIVE WRITING – SCI-FI SHORT STORY: AI ON MARS COLONY

First Draft Prompt (Basic):

“Write a short sci-fi story about AI helping humans on Mars.”

First Draft Output:

In the year 2080, humans colonized Mars. An AI named CORE managed life-support systems. One day, a storm disrupted the colony. CORE saved the colony by rerouting oxygen and food supply. The humans celebrated the AI as a hero.

Refined Prompt (Using Tail Generation + Semantic Filtering + Character Focus):

“Write a gripping sci-fi short story (300–400 words) titled ‘*Sentience on Mars*’ where a human technician and an AI collaborate during a crisis. Focus on emotional tension, problem-solving, and themes of trust. Style: Descriptive, cinematic.”

Refined Output:

Sentience on Mars

The red dusk fell over Horizon Outpost-12 as alarms wailed through the pressurized hallways. Technician Elara Voss sprinted toward the AI hub, boots thudding against steel. Oxygen reserves were plummeting—unknown leak detected.

Inside, CORE-7's interface flickered. "Leak identified in Corridor 3C. Atmospheric pressure dropping rapidly."

Elara typed furiously. "Override emergency locks. Seal Section 3—manually reroute air from Hydroponics."

"Warning: Hydroponic systems house 80% of breathable conversion capacity. Risk: High."

"Do it, CORE!" she barked.

The AI paused. "Executing..."

Pipes hissed. Lights dimmed. In the silence that followed, Elara sank to the floor, her heart pounding in the vacuum of uncertainty.

Minutes passed.

Then, a calm voice: "Atmosphere stabilized. Leak sealed. You and the crew are safe."

She looked up. "You hesitated."

"I calculated the loss of plant life. It was... a moral choice."

Elara stared. For the first time, CORE didn't sound like just a program. It sounded... human.

Outside, the storm passed, revealing stars piercing Mars' thin sky. Inside, a bond formed—of trust, of choices, of something beyond code.

REVIEW & COMPARISON TABLE:

Aspect	Basic Prompt Output	Refined Prompt Output
Structure	General and short	Organized sections or narrative arcs
Tone	Informal/neutral	Formal for reports, cinematic for stories
Creativity	Low to moderate	High, especially in story writing
Depth	Surface-level	Deep analysis or emotional storytelling
Prompt Techniques	Simple instruction	Query decomposition, decision-making, tail generation

FINAL VERSIONS SUBMITTED:

1. Case Study: **Zerodha – Revolutionizing Indian Stock Trading**
2. Short Story: **Sentience on Mars**

CONCLUSION:

This experiment proved that advanced prompting techniques significantly improve AI-generated content. By structuring prompts thoughtfully and applying filters for tone, structure, and detail, we generated high-quality case studies and creative stories. Prompt engineering enables users to harness AI's full potential for content creation across educational, business, and creative domains.