**19TD608-PROMPT ENGINEERING**

**NAME:LAVANYA S**

**REG NO:212222070017**

**DEPT:EIE**

**EXP NO:10**

**Content Creation (Reports, Articles, Case Studies, etc.) Using Prompt**  **Patterns**

**Aim:**

To demonstrate how various prompting techniques (query decomposition, decisionmaking, 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.

**Scenario-1 Business Report on Market Trends:**

**Query Decomposition:**

In query decomposition, complex questions are broken down into smaller, manageable sub questions to generate more structured and detailed reports.

Prompt Structure:

Prompt 1: “What are the key market trends shaping the future of business?”

Prompt 2: “How is technology, such as AI and IoT, influencing business strategies?”

Prompt 3: “What are the consumer behavior shifts businesses must adapt to?”

Prompt 4: “How do sustainability and green initiatives impact market trends?”

Output:

The content produced will be more detailed, with each prompt focusing on one aspect of the market trends, resulting in a thorough report that covers all major factors influencing the market.

**Decision-Making Prompts:**

This technique focuses on asking the AI to make decisions between different options or strategies to guide the report’s direction.

Prompt Structure:

“Given the rising demand for sustainability, should businesses focus more on adopting green technologies or improving their supply chain efficiency? Provide the rationale.”

Output:

The AI will make a decision between sustainability and supply chain improvements, offering a focused report that provides insights on which trend businesses should prioritize, supporting a clear, well-argued decision.

**Semantic Filtering:**

Using semantic filtering to guide the style and tone of the report ensures it matches the professional and formal nature of a business report.

Prompt Structure:

**“**Write a formal business report on the impact of digital transformation on market trends, including data-backed insights and industry examples.”

Output:

The output will be a well-structured, formal report with clear, data-driven analysis, ensuring that the tone and style are appropriate for a business audience.

**Contextual Layering:**

This involves providing context to the model in stages to ensure that the content flows logically from one idea to the next.

Prompt Structure:

Prompt 1: “Explain the role of technology in modern business.”

Prompt 2: “What are the major technological innovations driving change in business?”

Prompt 3: “How do these innovations affect market strategies and consumer expectations?”

Output:

The content generated will follow a logical progression, providing an introduction to technology, explaining specific innovations, and then linking those innovations to business strategies, creating a coherent and well-structured report.

**Scenario-2**

**Case Study on Business Success**

**Query Decomposition:**

By breaking down the case study into key areas, we can provide a comprehensive analysis of the business’s success.

Prompt Structure:

Prompt 1: “What challenges did the company face in its early years?”

Prompt 2: “How did the company leverage technology to overcome these challenges?”

Prompt 3: “What strategies did the company adopt to expand into new markets?”

Prompt 4: “How did the company incorporate sustainability into its business model?”

Output:

The case study will cover each critical aspect of the business’s journey, from initial challenges to strategies for market expansion and sustainability, providing a complete picture of the company’s success.

**Decision-Making Prompts:**

This technique focuses on having the AI choose between different strategic options that a company might take to achieve success.

Prompt Structure:

“If a company has the option to focus on expanding its product line or improving its existing products, which approach should it take in order to achieve long-term growth?”

Output:

The AI will make a recommendation on the best course of action, focusing the case study on one strategy and detailing how it contributes to business success.

**Semantic Filtering:**

For case studies, semantic filtering helps to maintain a professional tone that aligns with the analytical and business-focused nature of the content.

Prompt Structure:

“Write a case study on a technology company that grew through strategic innovation, focusing on the challenges faced and the solutions implemented.”

Output:

The case study will be clear, concise, and analytical, with a professional tone suited to business readers.

**Contextual Layering:**

By layering context, we can ensure that the case study progresses logically, building up from the company’s early history to its current success.

Prompt Structure:

Prompt 1: “Describe the company’s founding and initial struggles.”

Prompt 2: “Explain how the company adopted new technologies to improve its operations.”

Prompt 3: “Discuss how the company navigated the competitive market to become a leader.”

Prompt 4: “Detail the company’s expansion strategies and its focus on sustainability.”

Output:

The case study will unfold in a structured manner, providing a coherent narrative from the company’s founding to its current success, with each section building on the last.

**Result**:

The experiment showed how using different prompting techniques can improve the quality and structure of AI-generated content. By applying techniques like breaking down questions into smaller parts (query decomposition), guiding the AI to make decisions (decision-making), ensuring the right tone (semantic filtering), and organizing content logically (contextual layering), we were able to create better and clearer reports and case studies. These methods helped the AI generate content that was more detailed, focused, and well-organized, demonstrating how important prompt design is in getting the best results for different types of content.