**EX.NO: 3:**

**TYPES OF PROMPT ENGINEERING TECHNIQUES**

**AIM:**

To study and understand different types of prompt engineering methods such as **Straightforward Prompts**, **Tabular Format Prompting**, **Missing Word Prompting**, and **Preceding Question Prompting**, along with their practical examples.

**EXPLANATION:**

Prompt Engineering is the process of designing effective instructions or questions (called *prompts*) to guide an AI model in generating accurate and relevant responses.  
Different prompting styles can influence the quality, structure, and creativity of model outputs.

**TYPES OF PROMPT ENGINEERING**

| **Type of Prompting** | **Explanation** | **Example Prompt** | **Example Output** |
| --- | --- | --- | --- |
| **1. Straightforward Prompting** | The simplest and most direct type of prompt. It gives a clear instruction or question to the model without any additional context or formatting. | “Explain the concept of Artificial Intelligence.” | *Artificial Intelligence (AI) is a field of computer science that enables machines to perform tasks that require human intelligence, such as learning and problem-solving.* |
| **2. Tabular Format Prompting** | The prompt provides structured data or questions in a **table format**, which helps the model organize information clearly and respond systematically. Useful for comparisons and summaries. | **Prompt:** “Fill in the table comparing supervised and unsupervised learning.” | **Output:** | Type | Definition | Example | | Supervised | Uses labeled data for training | Email spam detection | | Unsupervised | Works on unlabeled data | Customer segmentation | |
| **3. Missing Word Prompting** | The prompt intentionally removes a keyword or phrase, asking the model to fill in the blank. This is useful for testing knowledge, vocabulary, or sentence completion. | “The process of training a neural network involves multiple \_\_\_\_\_\_\_ (iterations/epochs).” | *The process of training a neural network involves multiple epochs.* |
| **4. Preceding Question Prompting** | The model is asked a related question *before* the main one. The first question helps set context, so the model gives a more relevant or detailed response. | **Prompt 1:** “What is renewable energy?”  **Prompt 2:** “Based on that, explain why solar energy is important.” | *Renewable energy is obtained from natural sources that can be replenished. Solar energy is important because it provides a clean, sustainable source of electricity that reduces dependence on fossil fuels.* |

**RESULT:**

Thus, the different types of prompt engineering techniques were studied and demonstrated. It was observed that the **structure and clarity of prompts** have a significant impact on the quality and relevance of AI-generated responses.