AI P3 Lab-2

**Types of Prompts and Prompt Engineering Basics**

**Lab -2**

### **1. Instructional Prompts**

**You give a clear instruction or command to the AI, e.g., “Explain,” “List,” “Summarize.”**

**Example:**

* **“Explain the causes of World War I.”**

### **2. Interrogative Prompts**

**You ask a direct question.**

**Example:**

* **“What are the main causes of World War I?”**

### **3. Zero-shot Prompts**

**You give the AI a task without any examples or prior context.**

**Example:**

* **“Translate the following sentence to French: ‘I love reading books.’”**

### **4. Few-shot Prompts**

**You provide a few examples in the prompt before asking the AI to perform the task.**

**Example:**

* **“Translate these sentences to French:**
  1. **I like apples. -> J’aime les pommes.**
  2. **She is happy. -> Elle est heureuse.  
      Translate this: ‘We are friends.’”**

## **Prompt Engineering Basics**

**To get better responses, you can:**

* **Add context: “In the context of climate change, explain…”**
* **Be clear and specific: “List 3 causes of deforestation.”**
* **Use examples: (few-shot)**
* **Specify format: “Answer in bullet points.”**
* **Ask for reasoning: “Explain step-by-step why…”**

# **Your Task**

**Create 5 examples each of:**

* **Instructional prompts**
* **Interrogative prompts**
* **Zero-shot prompts**
* **Few-shot prompts**

**Then compare results (I’ll help you do that too).**

## **Examples to get started:**

### **Instructional Prompts**

1. **Describe the process of photosynthesis.**
2. **List five benefits of exercising daily.**
3. **Summarize the plot of Romeo and Juliet.**
4. **Explain how a car engine works.**
5. **Provide three tips for improving memory.**

### **Interrogative Prompts**

1. **What is photosynthesis?**
2. **Why is exercise important for health?**
3. **How does the plot of Romeo and Juliet end?**
4. **How does a car engine function?**
5. **What are some ways to improve memory?**

### **Zero-shot Prompts**

1. **Translate “Good morning” to Spanish.**
2. **Generate a poem about the ocean.**
3. **List the capitals of three European countries.**
4. **Provide a recipe for a simple chocolate cake.**
5. **Write a formal email requesting a meeting.**

**Few-shot Prompts**

1. **Translate to Spanish:**
   1. **Hello -> Hola**
   2. **Thank you -> Gracias  
       Translate: “Good night”**
2. **Generate a poem about nature:**
   1. **The sun sets low, the sky turns gold,  
       Birds sing softly, stories told.  
       Now write a poem about the moon.**
3. **List capitals:**
   1. **France - Paris**
   2. **Italy - Rome  
       Name the capital of Germany.**
4. **Recipe examples:**
   1. **Pancakes: flour, eggs, milk, sugar.**
   2. **Omelette: eggs, cheese, salt, pepper.  
       Give a recipe for a salad.**
5. **Formal email examples:**
   1. **Dear Sir/Madam, I would like to request...**
   2. **To whom it may concern, Please find attached...  
       Write a formal email asking for a job interview.**