# **Lab 2: Prompt Engineering – Types and Examples**

## 1. Instructional Prompts

These clearly instruct the AI what to do.

Prompt	Output
Summarize the following paragraph: [text]	Returns a concise summary.
Translate this sentence to French: "I love learning AI."	"J'aime apprendre l'intelligence artificielle."
Write a poem about the ocean in 4 lines.	4-line ocean-themed poem generated.
List 3 benefits of regular exercise.	Clear bullet list of benefits.
Explain the concept of gravity like I'm 10 years old.	Simplified explanation for a child.

#### 2. Interrogative Prompts

These are questions asked to elicit information or opinions.

Prompt	Output
What is machine learning?	Definition and explanation.
Why is the sky blue?	Scientific explanation involving light scattering.
How does ChatGPT work?	Breakdown of model architecture and training.
What are the uses of AI in healthcare?	Multiple applications listed.
Can AI be creative?	Discusses pros, cons, and examples.

## 3. Zero-Shot Prompts

The model is asked to complete a task with **no examples provided**.

Prompt	Output
Classify this sentence: "I hate this product" as positive or negative.	"Negative"
Convert this sentence to passive voice: "The cat chased the mouse."	"The mouse was chased by the cat."
Write a short story about a robot in the future.	Coherent sci-fi story generated.
Correct the grammar: "He go to school every day."	"He goes to school every day."
Summarize this paragraph: [text]	Acceptable summary produced.

## 4. Few-Shot Prompts

The model is given **1–3 examples** to learn from before completing a similar task.

Prompt	Output
*Translate to French: "Hello" $\rightarrow$ "Bonjour"	
"Goodbye" → "Au revoir"	
"Thank you" →*	"Merci"
*Correct grammar:	
"Me is happy." → "I am happy."	
"They is running." →*	"They are running."
*Classify sentiment:	
"I love this movie." → Positive	

"This is awful." →*	"Negative"
*Summarize:	
"Cats are independent animals" $\rightarrow$ "Cats are self-reliant."	
"Dogs need more attention" →*	"Dogs are needy."
*Create a synonym:	
"Fast" → "Quick"	
"Biq" →*	"Large"

## **Comparison Table**

Туре	Context Given	Accuracy	Flexibility	Use Case
Instructional	Explicit instruction	High	Medium	Clear tasks (writing, listing, translating)
Interrogative	Question format	Medium	High	Seeking info or explanation
Zero-shot Few-shot	No examples 1–3 examples provided	Medium High	High High	Quick, general tasks  Complex or nuanced tasks needing pattern learning
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