Assignment 06

Assignment Tasks : Assignment and practice of Prompt Engineering to craft effective prompts.

Task 1 — Prompt Categorization

Below are the given prompts categorized into suitable types, along with explanations (reasoning) for why they belong to those types.

Prompt 1: "Generate a logo for a tech startup using neon colors."

- Category: Visual / Creative Prompt
- Reasoning:
 - This prompt is asking to create a visual design (a logo).
 - It involves aesthetic elements like "neon colors" and "tech startup theme."
 - The main goal is visual content creation, not text-based explanation or conversation.
 - Such prompts are often used with image-generation tools or designers to produce visual outputs.

Prompt 2: "Explain blockchain to a 5-year-old."

- Category: Instructional / Educational Prompt
- Reasoning:
 - The prompt asks to teach or explain a complex concept (blockchain).

- It requires simplifying the language and ideas so that a young child can understand.
- This focuses on delivering information clearly in a way that matches the age and understanding level of the audience.
- The purpose is **knowledge transfer**, which makes it instructional.

Prompt 3: "You are a UX designer. Suggest improvements to this app layout."

- Category: Role-based / Evaluative Instructional Prompt
- Reasoning:
 - The prompt assigns the assistant a specific expert role ("UX designer").
 - It asks for analysis and improvement suggestions for an app layout (a user interface).
 - This involves evaluating something and giving constructive, instructional feedback.
 - The focus is on expert advice and actionable recommendations, not on casual conversation or purely creative generation.

Prompt	Category	Reasoning (Short)
Generate a logo for a tech startup using neon colors.	Visual / Creative	Creates a visual design using given style.
Explain blockchain to a 5-year-old.	Instructiona I / Educati onal	Explains a complex topic simply for a young child.
You are a UX designer. Suggest improvements to this app layout.	Role-based Instructi onal / Evaluati ve	Gives expert feedback and suggestions to improve layout.

Task 2 — Refinement Practice

Example

- Original: Make a poster.
- Refined: Create a poster for a school science fair with a blue background, cartoon robots, and bold text saying SCIENCE EXPO 2025.

Prompt 1

- Original: Write a story.
- **Refined:** Write a 500-word short story about a young astronaut stranded on Mars, focusing on their struggle to survive using limited supplies, with a hopeful and inspiring tone.

Prompt 2

- Original: Design a website.
- **Refined:** Design a clean, one-page portfolio website for a freelance graphic designer. Include sections for About, Projects, Testimonials, and Contact, with a minimal black-and-white color scheme and large visuals of previous work.

Prompt 3

- **Original:** Draw a picture.
- **Refined:** Draw a colorful illustration of a magical forest at night with glowing mushrooms, fireflies, and a small wooden bridge over a sparkling stream.

Prompt 4

• **Original:** Make a presentation.

• **Refined:** Create a 6-slide presentation about climate change for high school students, using simple language, charts showing temperature rise, and real-life examples of its effects on animals.

Prompt 5

- Original: Write an essay.
- **Refined:** Write a 300-word argumentative essay on why school uniforms should be mandatory, including at least three strong reasons supported by examples.

Key Features of Refined Prompts

- Clear topic or subject
- Specific length or format
- Defined tone or audience
- Visual or design details (if needed)
- Outcome or goal stated clearly

Task 3 — Prompt Design Exercise

Objective:

Design 5 original, clear, and effective prompts — each for a different domain or type of Al tool (text, image, video, coding/logic, education/training).

1. ChatGPT (Text-based Prompt)

Prompt:

Write a motivational speech of 300 words for college students who are starting their first year, encouraging them to stay confident, build good study habits, and explore new opportunities on campus.

Why it works:

- Clear target audience (college students)
- Defined tone (motivational)
- Specific content goals (confidence, study habits, opportunities)
- Word limit given (300 words)

2. DALL·E (Image-based Prompt)

Prompt:

Create a digital illustration of a futuristic eco-city with floating gardens, solar-powered skyscrapers, clean electric vehicles, and clear blue skies in a vibrant, cartoon style.

Why it works:

- Describes visual elements in detail
- Sets a theme (futuristic eco-city)
- Mentions art style (cartoon style)

3. SORA (Video-based Prompt)

Prompt:

Generate a 30-second video showing the life cycle of a butterfly: start with an egg on a leaf, show it hatching into a caterpillar, transforming into a chrysalis, and finally emerging as a butterfly flying away.

Why it works:

- Has a clear storyline with sequence
- Defined duration (30 seconds)
- Visual transformation steps provided

4. Coding / Logic Prompt

Prompt:

Write a Python program that asks the user to enter five numbers, stores them in a list, and then prints the largest and smallest numbers along with their positions in the list.

Why it works:

- Specifies programming language (Python)
- Gives clear task steps
- States exact input and output expectations

5. Education / Training Prompt

Prompt:

Create a 10-question multiple-choice quiz on the topic of global warming for high school students, with 4 options for each question and the correct answer marked.

Why it works:

- Mentions audience (high school students)
- Defines format (multiple-choice quiz, 10 questions)
- Topic is specific (global warming)

Key Features of Good Prompt Design

- Clear topic or task
- Defined format or output type
- Audience or level mentioned
- Style or tone if needed
- Any constraints like time, word count, number of items, etc.