Assignment 04: Assignment and Practice of SORA

## **Task 1: Research & Summary**

**What is SORA?** SORA is a cutting-edge text-to-video AI model developed by OpenAI. It can produce realistic, high-quality videos from text prompts. Unlike simpler tools, SORA understands and simulates complex visual aspects like 3D camera movements, lighting effects, motion, and real-world physics. It allows users to transform written descriptions into dynamic videos and animations with ease.

**Comparison with DALL·E, Pika Labs, and RunwayML** SORA specializes in video creation, whereas DALL·E (also by OpenAI) is a text-to-image model that generates still images rather than videos. DALL·E is useful for creating keyframes or concept art that can later be animated using software like Canva or CapCut.  
 Pika Labs and RunwayML are other AI tools for video generation. Pika Labs focuses on animating still images and offers an intuitive interface for simple video creation. RunwayML provides AI-powered video editing and generation, but its output is generally less realistic than SORA. Overall, SORA excels in realism, motion accuracy, and coherent scene representation.

**Ethical Considerations** The ability to generate realistic AI videos raises significant ethical concerns. Such tools can be misused to create misleading content, deepfakes, or inappropriate visuals. SORA prohibits generating videos featuring real people's likenesses or copyrighted material. Users must practice responsible usage, ensure transparency, and maintain digital literacy when working with these advanced tools.

**Task 2: Prompt Engineering Practice**

Here are five sample prompts for different areas:

1. **Education:** *"A 10-second animated video illustrating the water cycle—evaporation, condensation, precipitation, and collection—with moving clouds and flowing rivers."*
2. **Entertainment:** *"A cartoon dragon cooking pancakes over a fire inside a cozy cave during a rainy day."*
3. **Environment:** *"A plastic bottle floating in the ocean surrounded by fish and turtles, followed by a close-up view of a vibrant coral reef."*
4. **Technology:** *"A futuristic city at sunset with flying cars, glowing billboards, and robots assisting humans on the streets."*
5. **History:** *"An ancient Egyptian marketplace with merchants, camels, and pottery under a bright desert sun."*