Practical 4

Task 1

SORA: What It Is

SORA is an AI video generation model developed by OpenAI. Think of it like DALL·E, but instead of creating still images from text prompts, it creates moving videos. You type in a description—like "a sunset over a futuristic city with flying cars"—and SORA turns it into a realistic or stylized video clip. It can handle complex scenes, camera movements, and even some storytelling elements. SORA's goal is to make video creation as easy as typing an idea, opening up possibilities for filmmakers, educators, marketers, and hobbyists who don't have access to expensive cameras or editing teams.

Comparison with DALL·E and Other Tools

DALL·E is OpenAI's image generator. It's great for producing single, high-quality images from prompts, but it can't animate them. SORA, on the other hand, deals with time, motion, and continuity, which makes it far more complex. While DALL·E focuses on one "frame," SORA has to create dozens or hundreds of frames that flow smoothly.

Outside OpenAI, there are competitors like **Pika Labs** and **RunwayML**:

- **Pika Labs** is known for quick, stylized video generation, often aimed at creative storytelling and social media content. It's fast and fun but sometimes less realistic.
- RunwayML offers a full creative suite, not just text-to-video. It includes editing tools, effects, and AI-assisted workflows—good for professionals who need a more complete production pipeline.
 Compared to these, SORA's strength lies in realism, scene complexity, and integration with other OpenAI tools, though it may not have as many direct editing features as RunwayML yet.

Ethical Considerations

AI video generation brings powerful creative opportunities, but also serious ethical questions:

- 1. **Misinformation & Deepfakes** Realistic AI videos could be used to make fake news clips, impersonate people, or spread harmful content. This raises concerns about trust and authenticity online.
- 2. **Copyright & Ownership** If an AI is trained on existing films or videos, who owns the rights to the output? The creator of the prompt? The AI company? This is still a legal gray area.
- 3. **Bias & Representation** AI models can unintentionally reproduce stereotypes or cultural biases present in their training data, leading to unfair or offensive portrayals.
- **4. Job Displacement** While AI tools can empower creators, they may also reduce demand for certain roles in filmmaking, animation, or stock footage production.
- 5. **Consent & Privacy** Using AI to recreate a person's likeness without permission—whether for humor, marketing, or politics—can cross serious ethical boundaries.

The key takeaway is that tools like SORA are exciting, but responsible use is essential. Companies are working on safeguards, like watermarking AI-generated videos and requiring consent for likeness use. In the end, the balance between creativity and ethics will define how society embraces this technology.

Task 2

5 creative prompts across diverse domains:

- 1. **Education** "A 15-second animated explainer showing the water cycle, with raindrops falling from clouds, forming rivers, and evaporating back into the sky, narrated in a friendly tone."
- 2. **Entertainment** "A 12-second fantasy scene of a dragon soaring over a medieval castle at sunset, with villagers looking up in awe and colorful banners waving in the wind."
- 3. **Environment** "A 10-second time-lapse of a single tree growing from a tiny sapling into a massive oak, with birds building nests and flowers blooming around it."
- **4. Technology** "A 15-second futuristic cityscape with flying taxis, holographic billboards, and robots walking alongside humans, filmed as if from a drone's perspective."
- 5. **Social Awareness** "A 12-second split-screen video showing two versions of the same street—one clean with greenery and happy people, the other polluted with trash and smog."

Task 3

Role: Storyteller Topic: Photosynthesis

Detailed Prompt for SORA:

"A bright, colorful 15-second educational animation explaining photosynthesis as if nature itself is telling the story. Show sunlight, plants, and the transformation of carbon dioxide and water into oxygen and glucose. Use smooth camera motions, friendly narration, and soft background music."

Scene-by-Scene Breakdown:

0-3 seconds - The Sun's Gift

- Close-up of the sun shining over a lush green meadow.
- Sunlight rays gently cascade onto leaves.
- Narration: "Every story of life begins with the sun..."

3–6 seconds – The Leaf's Magic

- Zoom into a leaf, showing tiny cells and green chloroplasts glowing.
- Animated arrows show sunlight entering.
- Narration: "...and leaves, our little green factories, use that light to work their magic."

6-10 seconds - Transformation in Action

- Visual animation of carbon dioxide (CO₂) molecules entering the leaf and water (H₂O) traveling up from roots.
- Inside the leaf, sunlight energy turns them into sugar and oxygen.
- Narration: "They take in air and water, and turn them into food and fresh oxygen."

10-15 seconds - The Breath of Life

- Wide shot of a forest, animals breathing, and a child exhaling happily.
- Sunlight glows warmly over the scene.
- Narration: "This is photosynthesis—the miracle that keeps our planet alive."
- Fade out with text: "Powered by the Sun."