#### Task 1:

#### **SORA** and Al Video Generation

SORA is an advanced **text-to-video generation model** developed by OpenAI. It allows users to create short, realistic, or stylized videos simply by describing them in natural language. This makes video creation more accessible to educators, content creators, and businesses who may not have professional editing skills. By focusing on motion, continuity, and scene transitions, SORA goes beyond static image generation, enabling dynamic storytelling within seconds.

In comparison, **DALL·E**, also from OpenAI, specializes in **image generation**. While DALL·E is useful for creating single visuals like posters, illustrations, or concept art, SORA brings these still images to life through animation. Alternatives in the video AI space include **Pika Labs** and **RunwayML**. Pika Labs focuses on short-form, highly stylized animated clips that are popular on social media platforms. RunwayML, on the other hand, offers a more **professional toolkit** with advanced features like motion tracking, video editing, and generative fills, making it a strong choice for filmmakers and advertisers. Compared to these, SORA emphasizes **ease of use and conversational integration**, as it can work alongside ChatGPT to help users script, design, and generate videos in a seamless workflow.

However, Al-driven video generation raises several **ethical considerations**. One concern is the spread of **deepfakes and misinformation**, as realistic Al videos could be misused to impersonate individuals or manipulate public opinion. Another issue is **intellectual property**, since Al models may be trained on copyrighted data, raising questions about content ownership and originality. Additionally, Al could disrupt creative industries by reducing demand for traditional video production roles. Finally, bias in training data may lead to unfair or stereotypical representations in generated content.

In summary, SORA represents a powerful new tool in video creation, but its adoption must be guided by **responsibility**, **transparency**, **and ethical safeguards**.

#### Task 2:

#### 1. Education

"A 10-second animation of a chalkboard drawing itself with equations and diagrams, while a glowing light bulb floats above to symbolize new ideas."

#### 2. Entertainment

"A 10-second animation of a magician pulling galaxies out of a hat, as the stars swirl around an amazed audience."

#### 3. Environment

"A 10-second animation of a tiny seed sprouting into a large tree, with birds nesting on its branches and fresh green leaves growing."

## 4. Technology

"A 10-second animation of a futuristic city where drones deliver packages and holograms light up the streets at night."

## 5. Space/Exploration

"A 10-second animation of an astronaut floating in space, painting Earth with glowing colors as if it were a giant canvas."

#### Task 4:

Role: Educator

# Topic: Photosynthesis – 15-second SORA Video

## **Detailed Prompt for SORA**

"A 15-second educational video for school students explaining photosynthesis. Use bright and colorful 2D animations with the sun, green plants, water droplets, and oxygen bubbles. Show the step-by-step process of how plants use sunlight, carbon dioxide, and water to make food and release oxygen. Include clear narration, smooth transitions, light background music, and on-screen text highlighting keywords like Sunlight, Water, CO<sub>2</sub>, Glucose, and Oxygen."

# Scene-by-Scene Breakdown

## Scene 1 (0-4s): Introduction

• Visuals: A sunny day with a glowing title "Photosynthesis" over a green plant.

- On-screen text: "Plants make food with sunlight!"
- Narration: "Plants have a special process called photosynthesis."

## Scene 2 (4-8s): Inputs

- **Visuals:** Arrows show sunlight, water droplets, and CO<sub>2</sub> molecules moving into the leaf.
- On-screen text: "Sunlight + Water + CO₂"
- Narration: "They take in sunlight, water, and carbon dioxide from the air."

## Scene 3 (8-12s): Process

- Visuals: Inside the leaf, sunlight transforms into energy. Glucose molecules form, while oxygen bubbles rise.
- On-screen text: "Food + Oxygen"
- Narration: "Inside the leaves, they make food and release oxygen."

## Scene 4 (12-15s): Importance

- Visuals: Children and animals happily breathing fresh air near a tree.
- On-screen text: "Oxygen for Life!"
- Narration: "Thanks to photosynthesis, we all get the oxygen we need!"

# **Practice Activity:**

# Step 1: Generate Keyframes with DALL-E

We'll create **4 key images (scenes)** that represent each part of the 15-second video. **Prompts for DALL·E:** 

- 1. "A bright cartoon-style sun shining over a green plant in a garden, with the word 'Photosynthesis' glowing above."
- 2. "Arrows showing sunlight, water droplets, and CO<sub>2</sub> molecules entering a green leaf, colorful and educational style."
- 3. "Inside a leaf: glowing energy turning into sugar molecules, with oxygen bubbles rising."
- 4. "Children and animals breathing fresh air happily under a big tree, with the words 'Oxygen for Life!' in bold text."

# Step 2: Assemble in Canva or CapCut

- Import the 4 images as slides.
- Assign each image about **3–4 seconds** to match a 15-second duration.
- Add smooth transitions (fade, zoom, pan).
- Insert titles/captions with keywords: Sunlight, Water, CO<sub>2</sub>, Oxygen, Food.
- Add background music (soft, upbeat).

# **Step 3: Add Narration (Script)**

Record or use text-to-speech with the following short lines:

- 1. "Plants have a special process called photosynthesis."
- 2. "They use sunlight, water, and carbon dioxide from the air."
- 3. "Inside their leaves, they make food and release oxygen."
- 4. "Thanks to photosynthesis, we all get the oxygen we need to live!"

# Step 4: Export Video

Export as MP4 (15 seconds).
Your final video will simulate what a SORA-generated clip would look like.