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**Create a multimedia application that integrates images, sound, and video in a simple user interface.**

**Aim:**

To develop a simple **multimedia application** using Python that can:

* Display an image
* Play an audio file
* Play a video file

using appropriate Python libraries.

**Procedure:**

1. Import necessary Python libraries (PIL, IPython.display, matplotlib, etc.).
2. Upload multimedia files (image, audio, video) into the working directory.
3. Write Python code to:
   * Load and display an image.
   * Load and play an audio file.
   * Load and play a video file.
4. Execute the program.
5. Observe the output:
   * The selected image is displayed.
   * The audio file plays.
   * The video file plays within the output area.

**Code:**

from IPython.display import Audio, Video, display

from PIL import Image

import matplotlib.pyplot as plt

import os

from google.colab import files

print("Please upload your media files (image, audio, video)...")

uploaded = files.upload() # Choose: sample\_image.jpg, sample\_audio.mp3, sample\_video.mp4

print("\nUploaded Files:")

for filename in uploaded.keys():

print(" -", filename)

print("\nDisplaying Image:")

image\_file = 'sample\_image.jpg' # Change filename if needed

if os.path.exists(image\_file):

img = Image.open(image\_file)

plt.imshow(img)

plt.axis('off')

plt.show()

else:

print("Image file not found. Check the name.")

print("\nPlaying Audio:")

audio\_file = 'sample\_audio.mp3' # Change filename if needed

if os.path.exists(audio\_file):

display(Audio(audio\_file))

else:

print("Audio file not found. Check the name.")

print("\n Playing Video:")

video\_file = 'sample\_video.mp4' # Change filename if needed

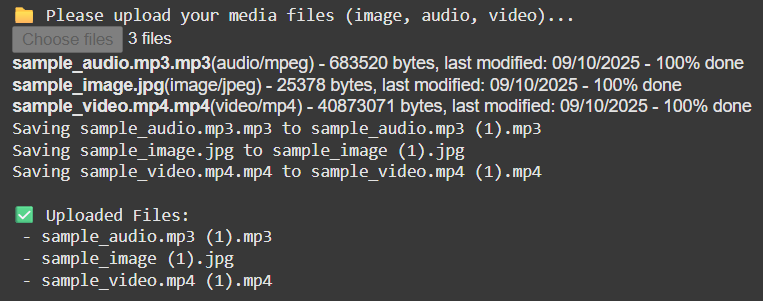
if os.path.exists(video\_file):

display(Video(video\_file, width=400))

else:

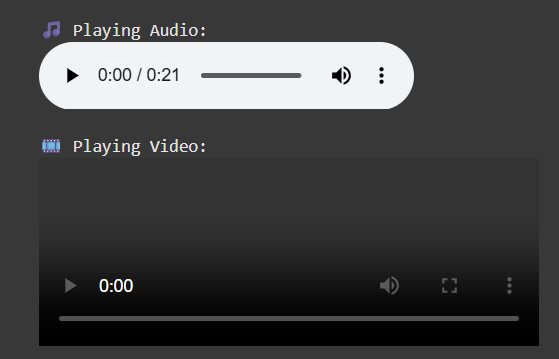
print(" Video file not found. Check the name.")

**Output:**



Displayed image :

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**Result:**

The Python multimedia application was successfully developed and executed.  
It was able to:

* Display the uploaded image,
* Play the given audio file, and
* Play the selected video file  
  within the same Colab notebook environment.