Task 1: Image Overlay Project

Objective:
Create a Python program that overlays images of filters onto a human face image. This will help you learn about image manipulation using the OpenCV library.

Requirements:

1. **Install Required Libraries:**
    - You need to install OpenCV and NumPy. You can do this using the following command:

      pip install opencv-python numpy
2. **Image Preparation:**
    - Find or create the following images:
        - A human face image // it could be your image
        - A filter image with a transparent background
3. **Overlay Functionality:**
    - Write a function that:
        - Takes a background image (human face) and an overlay image.
        - Places the overlay image at specified coordinates (x, y) on the background.
        - Handles transparency so the overlay blends naturally into the background.
4. **Resizing Images:**
    - Allow your program to resize the overlay images to fit well on the human face.
5. **Display and Save Results:**
    - Use OpenCV to display the final images with the overlays.
    - Save the resulting images with appropriate filenames.

Steps to Complete the Task:

1. **Setup Your Project:**
    - Create a new Python file.
    - Import the necessary libraries.
2. **Load Images:**
    - Load the human face and filters images using OpenCV.
3. **Implement the Overlay Function:**
    - Write a function that combines the overlay image onto the background image while considering transparency.
4. **Testing:**
    - Test your function by overlaying the dog and cat faces onto the human face at different positions.
5. **Final Touches:**
    - Add comments to your code for clarity.
    - Make sure to handle any potential errors.
6. **Submit Your Work:**
    - Share your completed Python file and the resulting images.

Learning Outcomes:

- Understand basic image processing concepts.
- Learn how to manipulate images using Python.
- Gain experience with libraries like OpenCV and NumPy.