PRACTICAL - 10

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Aim: Program to demonstrate how to add watermarks to an image using a python pillow.

Theory:

Watermark is generally some text or logo overlaid on the photo that identifies who took the photo or who owns the rights to the photo.

Pillow package allows us to add watermarks to your images. For adding watermark to our image, we need **"Image"**, **"ImageDraw"** and **"ImageFont"** modules from pillow package.

The 'ImageDraw' module adds functionality to draw 2D graphics onto new or existing images. The 'ImageFont' module is employed for loading bitmap, TrueType and OpenType font files.

Watermarking is the process of superimposing a logo or piece of text atop a document or image file, and it's an important process when it comes to both the copyright protection and marketing of digital works.

There are a couple of key reasons why you might need to watermark a document or image. On one end, watermarking helps protect the copyright of your work and ensures that it cannot be reused or altered without your permission. This means that people can still preview your work before purchasing it, without the risk of them stealing it.

On the other end, watermarking can simply be used as a branding tactic. Much like a painter will mark their work with a signature, digital watermarking is a way to get your name out and heighten brand awareness, so you know that any time

your work is shared, say on Instagram for example, your name or brand is always attached to it.

In other cases, a digital watermark may act as a stamp, to indicate the status of a document, with terms like "VOID," "COPY," or "SAMPLE." This ensures that important documents are never mishandled, helping you keep your work organized as you take it from draft to finalization.

A watermark could be a logo, an image, or text, and it can be as subtle or prominent on a document or photo as you'd like. You may want your watermark to feature copyright information, an identifier like your name or logo, or status information, like "Draft," or "For Review."

If you're watermarking photos or video files that you hope to sell online, you might opt for a semi-transparent watermark that covers the entire frame. It's important to remember that if your watermark is small and tucked into the corner of your image, it could still be cropped out by crafty content thieves.

If you're watermarking a digital image to protect your work, it'd be wise to place your watermark somewhere where it can't be easily Photoshopped out. If you position it over a smooth, solid background, it would be fairly simple to edit out, so it's best to place it over a busier part of the image.

You'll notice this on many tabloid and photojournalist shots; where the watermark is placed directly over the subject of the photo. They know where the money is—and by placing watermarks over the part people want to see, they're ensuring nobody else can profit off their work, not least without exposing their theft.

On the other hand, if your watermark is obtrusive and covers an entire image, it might distract from the quality of the work.
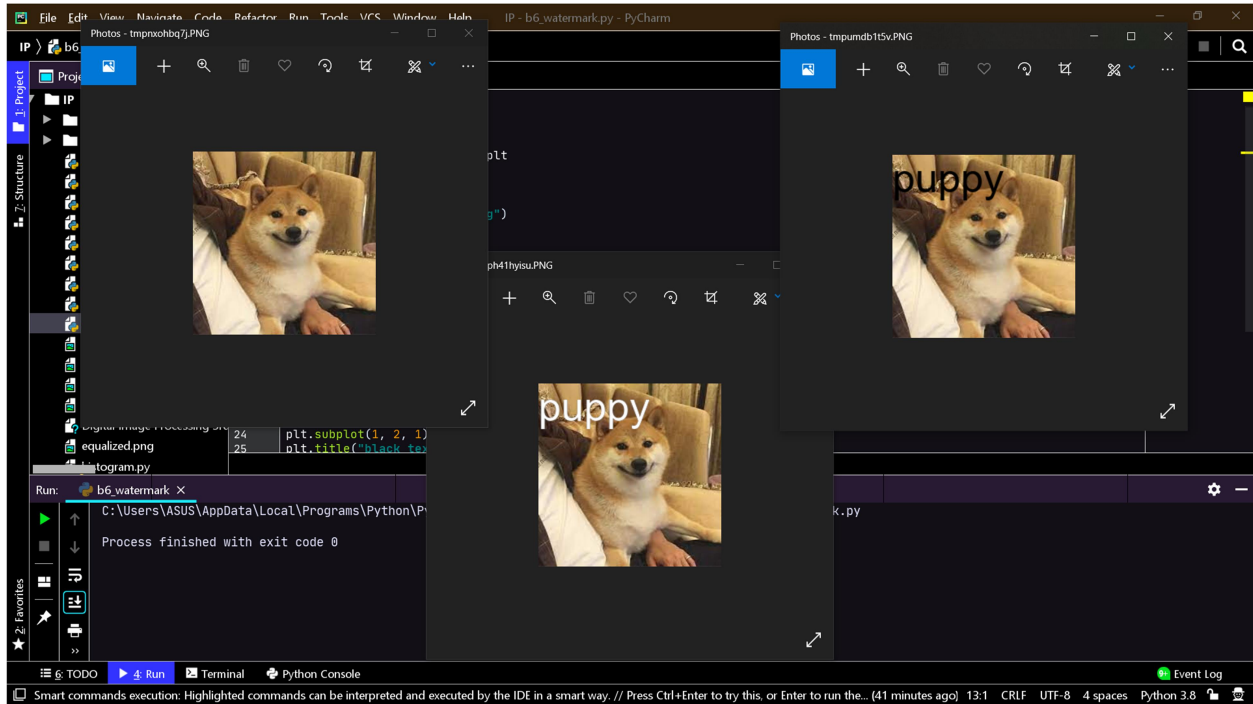
You may want a watermark that appears to blend into the photograph, to give it a more natural look that still promotes your brand. Some would prefer more transparent, modest branding, while others might favor an opaque, eye-catching watermark.

It's important to strike a balance that works for you based on what you're watermarking and why you're watermarking it.

Requirements:

- Pillow
- Matplotlib
- numpy

Output:

Conclusion:

In this practical we have learnt how to add watermarks to an image using a python pillow.