**Bitmap Parser:**

The open\_bmp method is responsible for reading a BMP file. It reads the BMP header and DIB (Device-Independent Bitmap) header to extract information about the image, such as width, height, and pixel data.

The pixel data is stored in a NumPy array named pixels. The pixel values are read from the BMP file and stored in reverse order to account for the BMP format's bottom-to-top pixel storage.

The apply\_filter method uses a "filter kernel" to give the image a special effect. It does this by sliding the kernel over the image and recalculating the colors of the pixels underneath. The apply\_image\_effect method, along with NumPy's np.convolve function, does the math to calculate the new colors based on the filter.