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Instance Method

colorThreshold(_:destination:)

Creates a binary image from a 32-bit pixel buffer.

iOS 16.0+ | iPadOS 16.0+ | Mac Catalyst | macOS 13.0+ | tvOS 16.0+ | visionOS | watchOS 9.0+

```
func colorThreshold(
    _ threshold: Float,
    destination: vImage.PixelBuffer<Format>
)
```

Available when `Format` conforms to `StaticPixelFormat` and `Format.ComponentType` is `Float`.

Parameters

`threshold`

The threshold value.

`destination`

The destination pixel buffer.

Mentioned in

 Applying flood fills to an image

Discussion

This function generates an image with source values that are less than `threshold` set to 0, and source values that are greater than `threshold` set to 1.

Use this function to binarize an image. For example, the following code applies a threshold of `0.5` to a pixel buffer. The source values `0.0`, `0.2`, and `0.4` are less than the threshold and the function returns `0.0` for the first three elements. The source values `0.6`, `0.8`, and `1.0` are greater than the threshold and the function returns `1.0` for the last three elements.

```
let buffer = vImage.PixelBuffer<vImage.PlanarF>(
    pixelValues: [0.0, 0.2, 0.4, 0.6, 0.8, 1.0],
    size: vImage.Size(width: 6,
                      height: 1))

buffer.colorThreshold(0.5,
                     destination: buffer)

// Prints "[0.0, 0.0, 0.0, 1.0, 1.0, 1.0]".
print(buffer.array)
```