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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)
```