**Tasks 1 / 4**: Load four arbitrary images and their corresponding segmentation masks and metadata

Text

Description automatically generated

**Task 2 / 4**: Plot the images with the segmentation masks overlaid in a picture

A picture containing night sky

Description automatically generatedA picture containing monitor, dark

Description automatically generatedA screenshot of a computer

Description automatically generated with medium confidenceA close-up of a jellyfish

Description automatically generated with medium confidence

**Task 3 / 4**: Convert an image from RGB to Grayscale

A picture containing text

Description automatically generated

**Task 4 / 4**: which method for RGB to grayscale conversion is the preferred one? State in 1-2 sentences why you think this

- I think the Luminosity method is the preferred one. in the Lightness method we are taking the maximum and the minimum so it may be affected by noise. So, averaging is more robust to the noise. but the Luminosity is a weighted average to account for human perception. consequently, I think the Luminosity method is the best one.