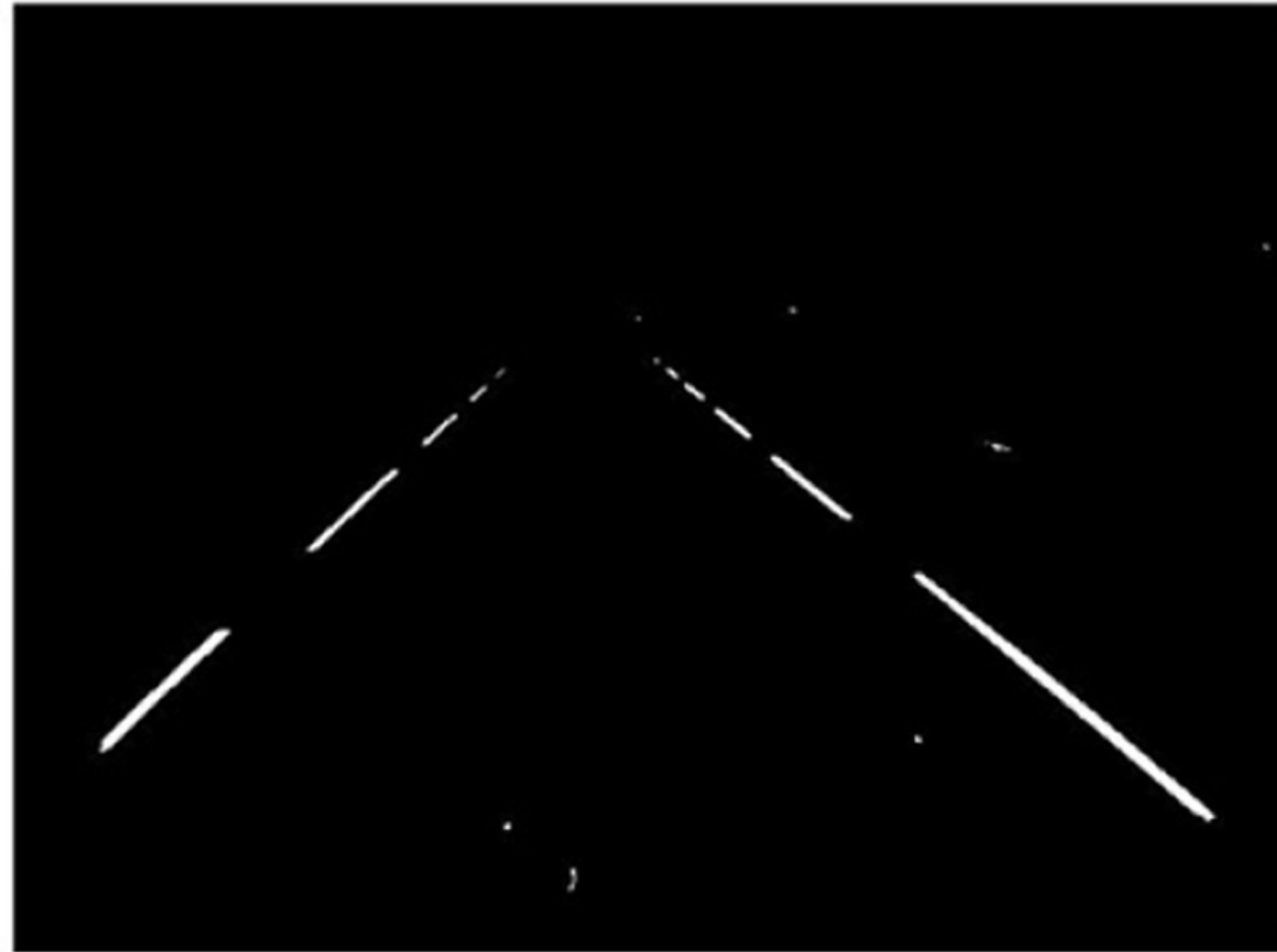


# Exercises 12

**SIFT Detector (700)**

1. Split the 8th frame of the video (lane.mp4) and Denoise that, then find the edges, and finally show the edges on the original frame!  
(denoising and edge detection method are desired!)

*a**b*

2. By yourself, Take a **color photo** of an object and then place that object in another environment. Then resize and turn it around and retake a picture of it. Now extract and match the **keypoints** of these two photos twice. Once when the image is in **color** and once when the image is **Gray level**. Which one works better? Why?

