For each of these challenges, it is up to you to add appropriate parameters, and explain the input and output clearly in a mini user manual. This is the block that precedes the function definition, delimited by triple quotation marks.
As always, the code itself should contain proper commenting (#) directed at a programmer.

Challenge 1 *blurring()*

Write a function that takes a gray-scale picture, and offers two options for noise removal: uniform or gaussian.

.....

Challenge 2 *detect_edge()*

Write a function that takes a gray-scale image and detects edges, with the option of horizontal, vertical or both.

.....

Challenge 3 *otsu_threshold()*

Write a function that splits a gray-scale image into foreground and background using Otsu's thresholding method.

.....

Challenge 4 *blur_background()*

Write a function that combines your first and second challenge, by identifying the background of an image, and blurring it.

.....