ROBOTICS – Python Development – Lab 11 - Homework

1. We need to process images for identification of logos and marks by automated software. We need to implement the following operations for such images using OpenCV, as a data preparation step:

    a. Resize the image to have exactly 500 pixels width, the height being proportionally modified;

    b. Transform the image to grayscale;

    c. Transform the image to binary using a threshold equal to grayscale pixel average value;

    d. Generate the image contours using canny algorithm with minimal and maximal thresholds being 0.25 and 0.75 of average pixel values of the threshold image;

    e. Save the contour image in PNG format.

Implement the sequence of operations above and test it on the file **Logo_UTCN.png** from the **images** directory of the homework directory.