About the project:

A closed path K in p in a digital image X is a series of black pixels from X,

                                 р=р0,  р1,  р2,........,  рn-1, рn = р

The closed path p, p is called constant.

If the closed path L in p is obtained from K by adding a pixel we will say that L is an elementary extension of K, and for K that it is an elementary shortening of L.

If L can be obtained from K with a series of elementary extensions and shortenings, we say they are homotopic.

The closed path is simple if there is no recurrence of pixels.

Our goal is to make a VB-project that by input of a number of pixels(the input is in the form of coordinates of the pixel that we want to enter), for each closed path K and L, will determine whether K is homotopic with the closed path.