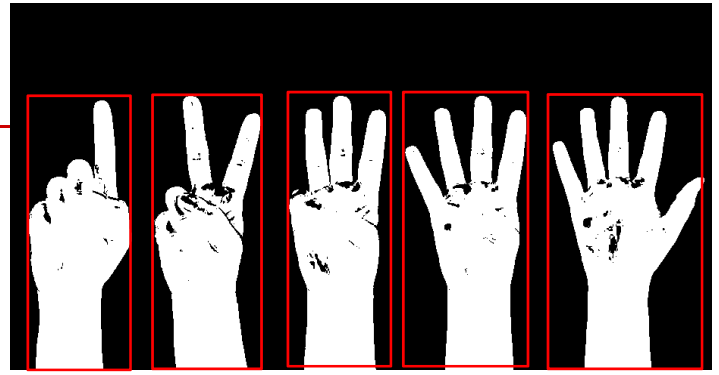
HW2



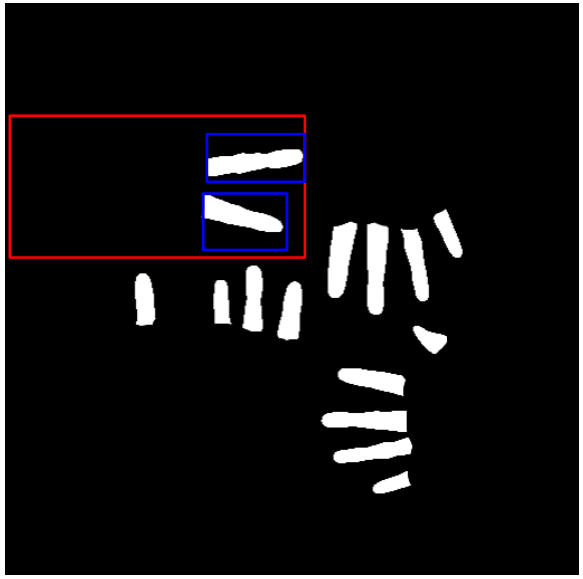
- Due on 11/11, 23:59
- Connected components
  - Generate a binarized image
  - Label the five hands with 4-connected neighbor
    - Label each connected component (large area) with a RED bounding box in output image.
    - Compute the centroid and area of each hand, and print the data on output image or command window
  - Use the morphology algorithms to reserve the hands

    i.e., the output connected components are only five regions
  - Report the following properties of the five hands
    - the length and orientation of the longest axis
  - Analyze and print the computational time of your program

Time(sec.)	binarizing	morphology	connected component	property analysis	drawing
C program	xxx	xxx	xxx	xxx	xxx
OpenCV	ooo	ooo	ooo	ooo	ooo

HW2

- Bonus
  - Use the morphology algorithms to reserve the fingers
  - Label the fingers with 4-connected neighbor
    - Label each finger with a BLUE bounding box in output image
  - Report the following properties of each finger
    - the length and orientation of the longest axis
  - Report the numbers indicated by each hand



HW2

- Requirements
  - Two Programs
    - C or C++ source code with .exe file (You are NOT allowed to use any library, such as OpenCV)
      - Except the R/W image
      - You can also use .raw to complete your work
    - by using OpenCV
  - Report
    - Describe the employed source code editor and how to execute your program (input/interface/output)
    - Introduce your work, method, and discussions
    - With all of the images or results
  - Upload to i-school Plus