

# Assignment 10

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# Assignment 10



- Develop a program which performs pixel-based background subtraction
  - Read 'background.mp4' as gray-scale
  - Set background image as the average of the first 10 frames
  - Generate a binary image by using the following equation
    - $Result(x, y) = \begin{cases} 255 & |Current\ frame(x, y) - Background(x, y)| > 20 \\ 0 & Otherwise \end{cases}$
- Draw bounding rectangle on the input video each moving object whose size is bigger than 400 pixels
- Print out the number of moving objects on the image whose size is bigger than 400 pixels

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- Your program should display three windows
  - 'background subtraction'