

LAB 4

2017. 07. 17



EXERCISE

1. Straighten the statue tower. (import math and use 640x480.jpg)

Input:



Output:



$$\begin{bmatrix} x' \\ y' \end{bmatrix} = \begin{bmatrix} \cos \theta & -\sin \theta \\ \sin \theta & \cos \theta \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix}$$

e.g. `sin(10)`
`th = math.radians(10)`
`sin func -> math.sin(th)`

EXERCISE

2. Cropping Bigben. (Use 640x480.jpg)

Input:



Output:



EXERCISE

3. Blur except the dog.

Input:



Output:



EXERCISE

4. Change the light color.

Input:



Output:



EXERCISE

4. Change the light color. (Use distance function)

$$\sqrt{(red_1 - red_2)^2 + (green_1 - green_2)^2 + (blue_1 - blue_2)^2}$$

e.g. 1) `distance(white, black)`

e.g. 2) `distance(makeColor(R,G,B), getColor(px))`

EXERCISE

5. Make them love again!

Input:



Output:

