**RESCALING**

import cv2 as cv

def rescaleFrame(frame, scale=0.75):

    width = int(frame.shape[1]\*scale)

    height = int(frame.shape[0]\*scale)

    dimensions = (width, height)

    return cv.resize(frame, dimensions, interpolation=cv.INTER\_AREA)

def changeRes(width, height):

    capture.set(3, width)

    capture.set(4, height)

# Rescaling images

img = cv.imread('./Resources/Photos/cat.jpg')

resized\_img = rescaleFrame(img, 0.2)

cv.imshow('Cat', img)

cv.imshow('Cat resized', resized\_img)

cv.waitKey(0)

# Rescaling videos

capture = cv.VideoCapture('./Resources/Videos/dog.mp4')

while True:

    isTrue, frame = capture.read()

    cv.imshow('Video', frame)

    cv.imshow('Video resized', rescaleFrame(frame, 0.5))

    if cv.waitKey(20) & 0xFF == ord('d'):

        break

capture.release()

capture.destroyAllWindows()

cv.waitKey(0)

**DRAWING**

import cv2 as cv

import numpy as np

# Create a blank image

blank = np.zeros((500, 500, 3), dtype='uint8')

cv.imshow('Black', blank)

# 1. Paint the pixels of this image

blank[200:400, 100:300] = 0, 255, 0

cv.imshow('Green', blank)

# 2. Draw a rectangle

cv.rectangle(blank,(0, 0),(blank.shape[1]//2, blank.shape[0]//2),(0, 255, 0),thickness=2)

cv.imshow('Green Rect', blank)

# 3. Draw a circle

cv.circle(blank, (blank.shape[1]//2, blank.shape[0]//2),20, (0, 0, 255), thickness=-1)

cv.imshow('Red Circle', blank)

# 4. Draw a line

cv.line(blank, (0, 0),(blank.shape[1]//2, blank.shape[0]//2), (255, 255, 255), thickness=3)

cv.imshow('Line', blank)

# 5. Write text

cv.putText(blank, 'Hello', (255, 255),cv.FONT\_HERSHEY\_COMPLEX, 1.0, (0, 255, 0), 2)

cv.imshow('text', blank)

cv.waitKey(0)