LIST OF EXPERIMENTS

1.Perform basic Image Handling and processing operations on the image is to read an image in python and Convert an Image to Gray-scale.

2. Perform basic Image Handling and processing operations on the image is to read an image in python and Convert an Image to Blur using Gaussian Blur

3.Perform basic Image Handling and processing operations on the image is to read an image in python and Convert an Image to show outline using Canny function.

4.Implement histogram equalization on the given image and compare it with the original image using Open CV.

5.Write a Python function to analyze the histogram of the given input image based on color levels using Open CV.

6.Perform basic Image Handling and processing operations on the image is to read an image in python and Convert an Image to erode using Erode function.

7.Perform basic video processing operations on the captured video. Read captured video in python and display the video, in slow motion and in fast motion.

8.Perform basic Image Handling and processing operations on the image is to read an image in python and Dilate an Image using Dilate function

9.Implement the image scaling techniques to resize the images to both bigger and small sizes

10.Perform a 90-degree rotation clockwise along the y-axis for the given image.

11 .Perform a 180-degree rotation clockwise along the y-axis for the given image

12.Perform a 270-degree rotation clockwise along the y-axis for the given image.

13.Perform Affine Transformation on the given image using python and Open CV

14.Perform Perspective Transformation on the given image using python and Open CV.

15.Perform basic Image Handling and processing operations on the image is to read an image in python and detect the corners in the image using Harris Corner Detection function

16.Implement a Sobel algorithm using Open CV to filter the input image.

17.Design and implement a water marking technique to insert the watermark into the original effectively image using Open CV.

18.Implement image cropping, copying and pasting to select a region of interest (ROI) from the source image using Open CV.

19.Implement the Erosion Morphological operations technique using Open CV in python.

20.Implement the Dilation technique as a Morphological operation to dilate the foreground regions based on Open CV.

21.Implement the Opening technique as a Morphological operation to dilate the foreground regions based on Open CV.

22.Implement the Closing technique as a Morphological operation to dilate the foreground regions based on Open CV.

23.Implement the Top hat technique as a Morphological operation to dilate the foreground regions based on Open CV.

24.Implement the Black hat technique as a Morphological operation to dilate the foreground regions based on Open CV.

25.Recognize watch from the given image by general Object recognition using Open CV.

26.Implement a function to reverse the frames of the video to create a video in reverse mode using Open CV.

27.Implement a face detection algorithm using Open CV to detect and locate human faces in the images.

28.Implement a vehicle detection algorithm using Open CV to detect and locate vehicles in each frame of the video.

29.Implement an Eye detection algorithm using Open CV to detect and locate human eyes in the images.

30.Implement a Smile detection algorithm using Open CV to detect and locate human smile in the images.

31.Implement a Segmentation algorithm using Open CV to segment the given input image based on the given threshold values.

32.Write a Python function to create a white image size entered by the user and then create 4 boxes of Black, Blue, Green and Red respectively on each corner of the image. The size of the colored boxes should be 1/10th the size of the image. (HINT: the arrays of ones and zeros can be in more than 2 dimensions).

33.Write a Python function to create a white image size entered by the user and then create a shape of Rectangle using Open CV.

34.Write a Python function to create a white image size entered by the user and then create a shape of Circle using Open CV.

35.Write a Python function to create a text string entered by the user that must be appeared on the given image using Open CV.

36.Write a Python function to subtract the background of the given input image based on color levels using Open CV

37.Write a Python function to subtract the foreground of the given input image based on color levels using Open CV.

38.Write a Python function to Count the number of faces for the given input image using Open CV.

39.Write a Python function to play the given video in reverse mode in slow motion.

40.Write a Python function to extract the text from videos.