

Insert 8 to 10 image of your self in system they are single or group images doesn't matter.

1. Make red color circled which contain your face pixels in the Image.
2. Make a square block on the image where you are present.
3. Merge the images of yourself with different weights like image\_1 0.7 and image\_2 0.3 and also try some other which you will like.
4. take Images of your self and show in to array then change into data frame. Atleast 10 images and last column contain your name as label

## task 01

```
In [ ]: import cv2
image_path = 'image_1.jpeg'
image = cv2.imread(image_path)
x = 200
y = 60
radius = 40
cv2.circle(image, (x, y), radius, (0, 255, 0), 2)

# Display the image with the circle
cv2.imshow('Image', image)
cv2.waitKey(0)
cv2.destroyAllWindows()
```

## task 02

```
In [78]: import cv2

# Read the image
image_path = 'image_1.jpeg'
image = cv2.imread(image_path)
x = 170
y = 30
w = 60
h = 60
cv2.rectangle(image, (x, y), (x + w, y + h), (0, 255, 0), 2)

# Display the image with the square block
cv2.imshow('Image', image)
cv2.waitKey(0)
cv2.destroyAllWindows()
```

## task 03

```
In [79]: import cv2

# Read the two images
image_path1 = 'image_1.jpeg'
image_path2 = 'image_2.jpeg'

# Load the images
image1 = cv2.imread(image_path1)
image2 = cv2.imread(image_path2)

# Resize the images to have the same dimensions
resized_image_1 = cv2.resize(image1, (250, 250))
resized_image_2 = cv2.resize(image2, (250, 250))

# Merge the images with different weights
merged_image = cv2.addWeighted(resized_image_1, 0.7, resized_image_2, 0.3, 0)

# Display the merged image
cv2.imshow('Merged Image', merged_image)
cv2.waitKey(0)
cv2.destroyAllWindows()
```

## task 04

```

In [77]: import cv2
# Read the images of yourself
images = [cv2.imread(image_path) for image_path in ['image_1.jpeg',
                                                    'image_2.jpeg',
                                                    'image_3.jpeg',
                                                    'image_4.jpeg',
                                                    'image_5.jpeg',
                                                    'image_6.jpeg',
                                                    'image_7.jpeg',
                                                    'image_8.jpeg',
                                                    'image_9.jpeg',
                                                    'image_10.jpeg']]

ima = []
#showing arrays
for i, image in enumerate(images):
    #print(f"Image_{i + 1}:")
    #print(image)
    #resizing
    imma = cv2.resize(image,(250, 250))
    ima.append(imma)
    print()

ima
# array_image = []
# for image in images:
#     array_image.append(image)
#     print(array_image)

[[105, 122, 149]],

[[149, 171, 206],
 [149, 171, 205],
 [151, 174, 206],
 ...,
 [106, 123, 150],
 [105, 122, 149],
 [105, 122, 149]],

[[150, 172, 207],
 [149, 171, 206],
 [152, 175, 207],
 ...,
 [106, 123, 150],
 [105, 122, 149],
 [105, 122, 149]],

...,

```

```

In [78]: ima = [image.flatten() for image in ima]

```

In [79]: `ima`

Out[79]: `[array([ 31, 186, 231, ..., 100, 64, 224], dtype=uint8),  
array([149, 171, 206, ..., 146, 157, 177], dtype=uint8),  
array([39, 27, 27, ..., 31, 21, 21], dtype=uint8),  
array([ 83, 94, 114, ..., 82, 93, 113], dtype=uint8),  
array([98, 85, 77, ..., 37, 28, 18], dtype=uint8),  
array([223, 234, 238, ..., 147, 163, 170], dtype=uint8),  
array([62, 57, 56, ..., 37, 32, 31], dtype=uint8),  
array([ 43, 74, 113, ..., 19, 49, 126], dtype=uint8),  
array([ 64, 44, 39, ..., 124, 117, 102], dtype=uint8),  
array([24, 24, 24, ..., 35, 17, 6], dtype=uint8)]`

In [72]: `ima[0]`

Out[72]: `array([ 31, 186, 231, ..., 100, 64, 224], dtype=uint8)`


In [73]: `import pandas as pd  
#print(len(image_2d))  
data = pd.DataFrame(ima)`

In [74]: `data[:1]`

Out[74]:

	0	1	2	3	4	5	6	7	8	9	...	187490	187491	187492	187493	187494	1
0	31	186	231	31	186	231	31	186	231	31	...	224	100	64	224	100	

1 rows × 187500 columns




In [75]: `data["label"] = ["faiz"]*len(data)`

```
In [76]: data
```

Out[76]:

	0	1	2	3	4	5	6	7	8	9	...	187491	187492	187493	187494	187495
0	31	186	231	31	186	231	31	186	231	31	...	100	64	224	100	64
1	149	171	206	148	170	205	151	174	206	156	...	132	143	163	143	156
2	39	27	27	39	27	27	39	27	27	39	...	31	21	21	31	27
3	83	94	114	83	94	114	82	93	113	82	...	82	93	113	82	93
4	98	85	77	98	85	77	98	85	77	97	...	35	29	18	35	29
5	223	234	238	223	234	238	224	235	239	224	...	145	161	168	147	161
6	62	57	56	62	57	56	62	57	56	63	...	38	33	32	38	33
7	43	74	113	43	72	115	55	80	128	65	...	26	58	133	23	58
8	64	44	39	64	44	39	63	43	38	63	...	214	208	191	157	191
9	24	24	24	24	24	24	25	25	25	25	...	36	18	7	35	18

10 rows × 187501 columns



```
In [80]: data.to_csv("10 photos.csv", index = False)
```

```
In [ ]:
```