TASK 3 LGMVIP - Jupyter Notebook

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DEC BATCH TASK 3

ANURAG JADHAV

TASK 3 - Image to Pencil Sketch with Python

Importing Libraries

In [15]:
```
import cv2
import matplotlib.pyplot as plt
```

Uploading the image

In [22]:
```
image = cv2.imread(r"C:\Users\anura\Downloads\IMG_20211003_110625.jpg")
```

Converting the image to RGB format

In [23]:
```
image2 = cv2.cvtColor(image, cv2.COLOR_BGR2RGB)
plt.imshow(image2)
plt.axis(False)
plt.show()
```

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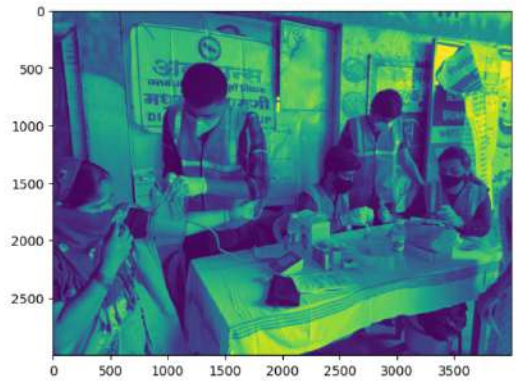
Converting the image to greyscale image

In [24]:
```
grey_scale_image = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)
plt.imshow(grey_scale_image)
```

Out[24]:
```
<matplotlib.image.AxesImage at 0x28c822d6550>
```



Inverting the image

In [25]:
```
inverted_image = cv2.bitwise_not(grey_scale_image)
plt.imshow(inverted_image)
```

Out[25]:
```
<matplotlib.image.AxesImage at 0x28c823169a0>
```

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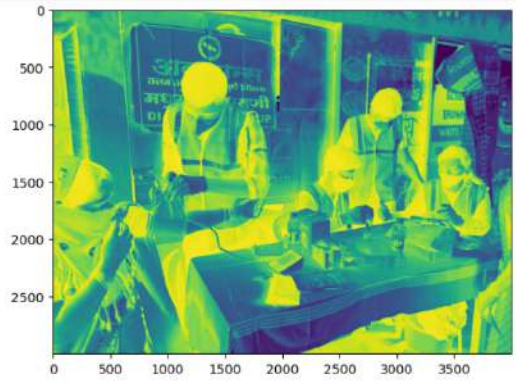
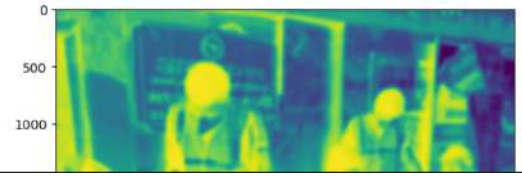


Blurring the image

In [26]:
```
blurred_image = cv2.GaussianBlur(inverted_image, (111,111), 0)
plt.imshow(blurred_image)
```

Out[26]:
```
<matplotlib.image.AxesImage at 0x28c82388e20>
```



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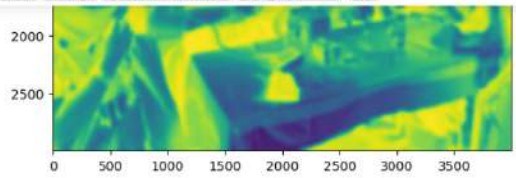
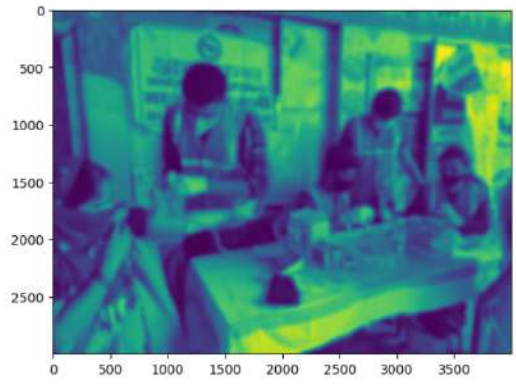


Inverting the blurred image

In [27]:
```
inverted_blur_image = cv2.bitwise_not(blurred_image)
plt.imshow(inverted_blur_image)
```

Out[27]:
```
<matplotlib.image.AxesImage at 0x28c823f1940>
```



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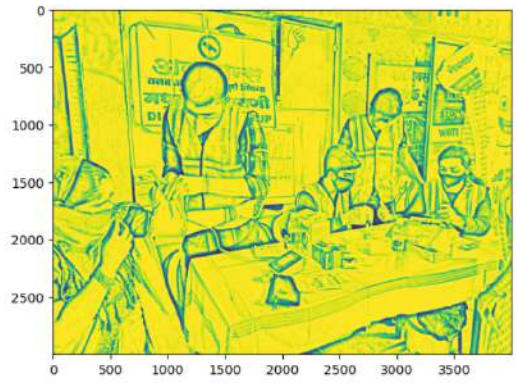
In [28]:
```
sketch_image = cv2.divide(grey_scale_image, inverted_blur_image, scale=256.0)
plt.imshow(sketch_image)
```

Out[28]:
```
<matplotlib.image.AxesImage at 0x28c825df5e0>
```



Saving the image

In [29]:
```
cv2.imwrite("sketch.png", sketch_image)
```

Out[29]:
```
True
```

Converting the image back to BRG format

In [30]:
```
plt.figure(figsize = (10,10))
image3 = cv2.cvtColor(sketch_image, cv2.COLOR_RGB2BGR)
plt.imshow(image3)
```

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```
plt.axis(False)
plt.show()
```

In [ ]: