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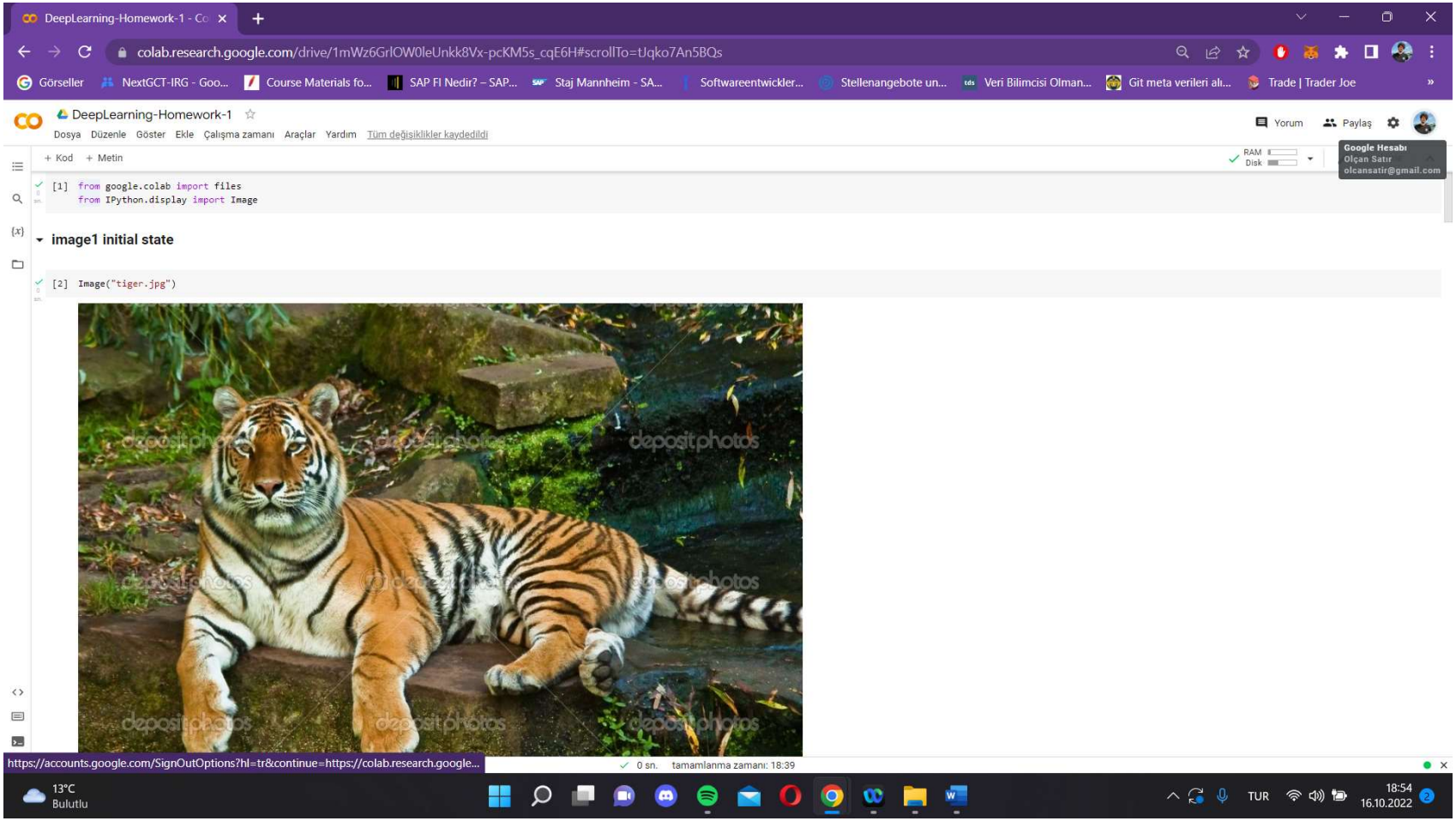
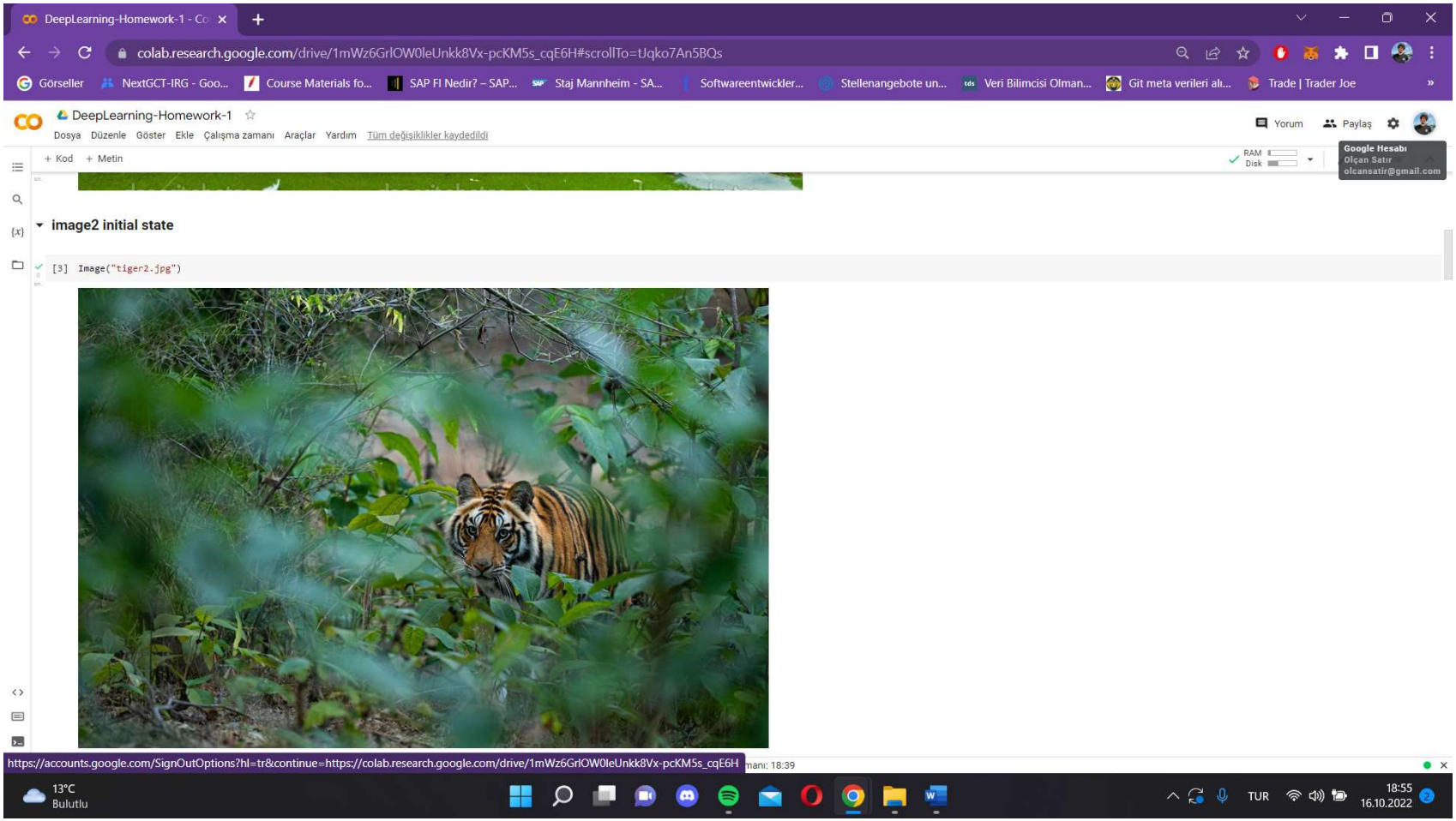
Deep Learning Homework-1 Report

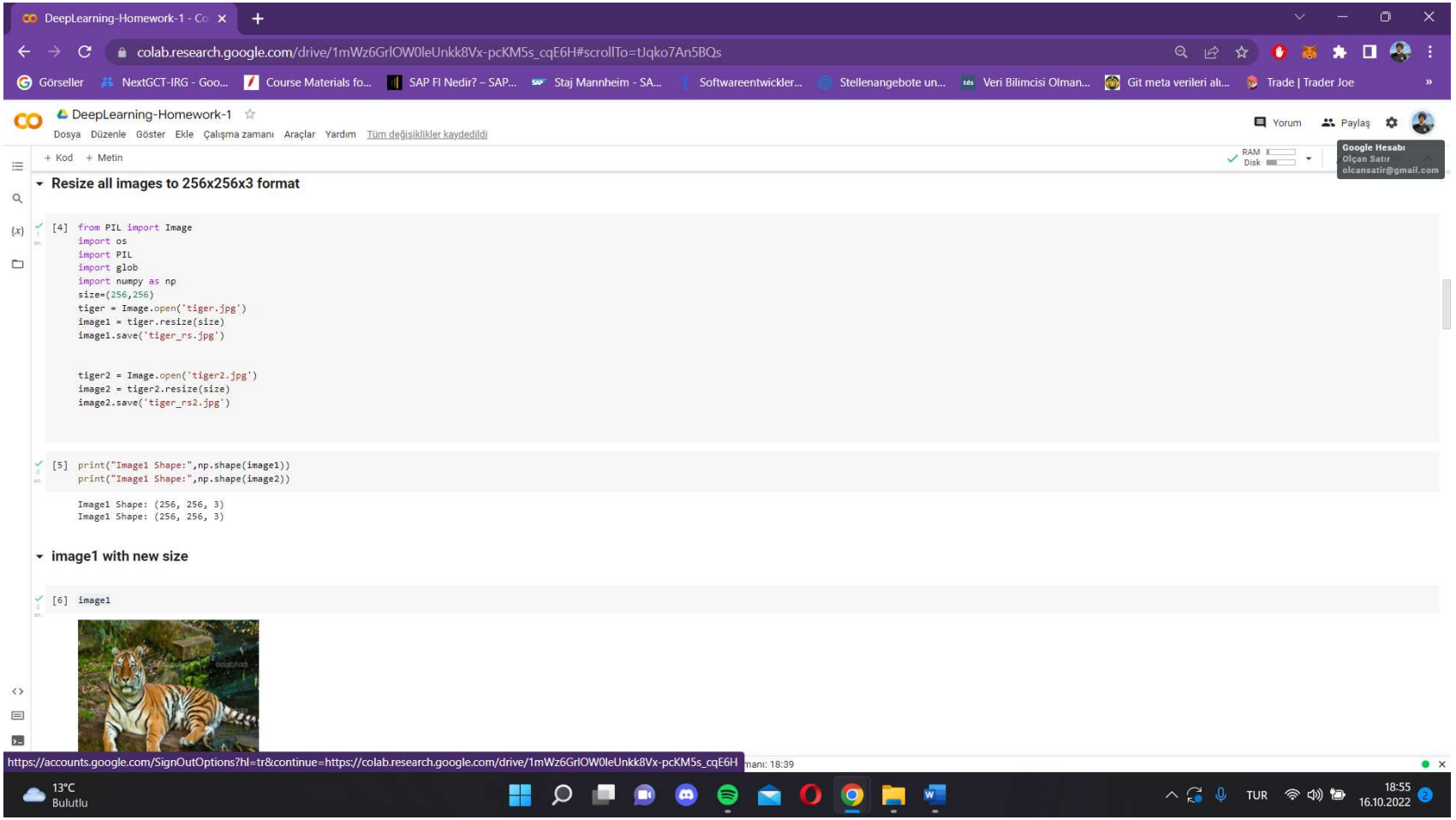
Question 1: We open the image1 given in this image in colab environment.



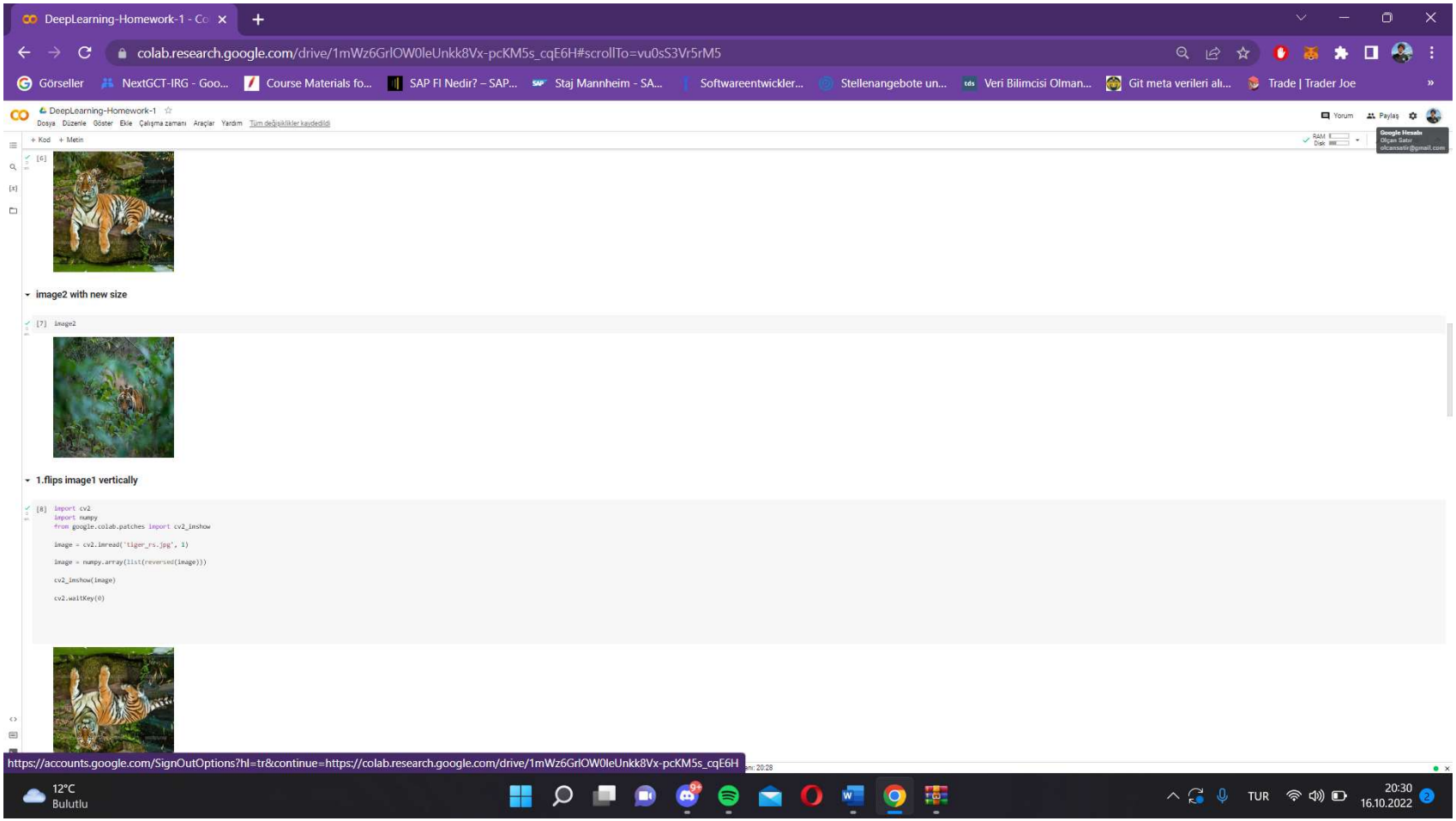
We open the image2 given in this image in colab environment.



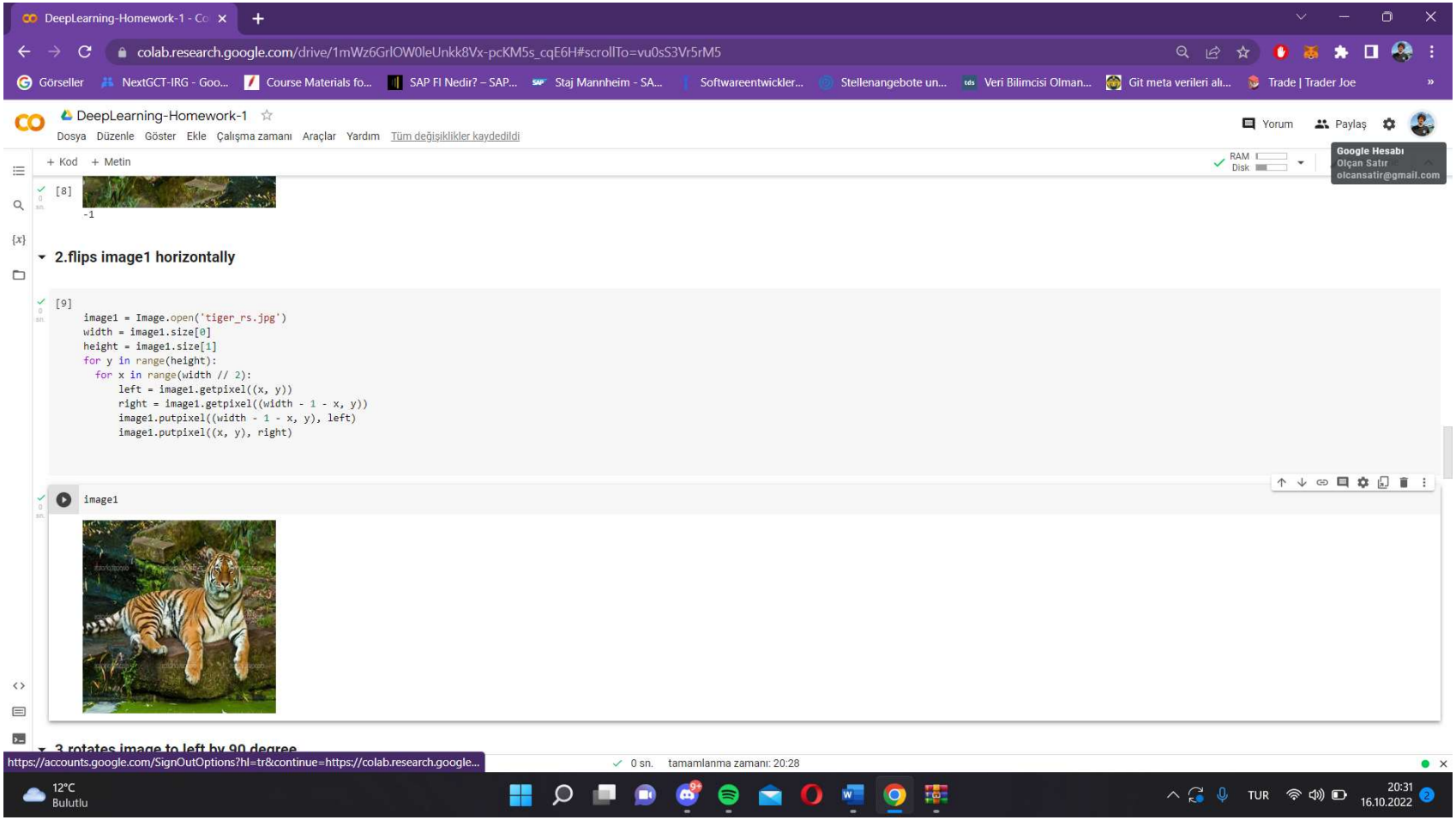
In this image, we are resizing the images and printing their shape for control purposes.



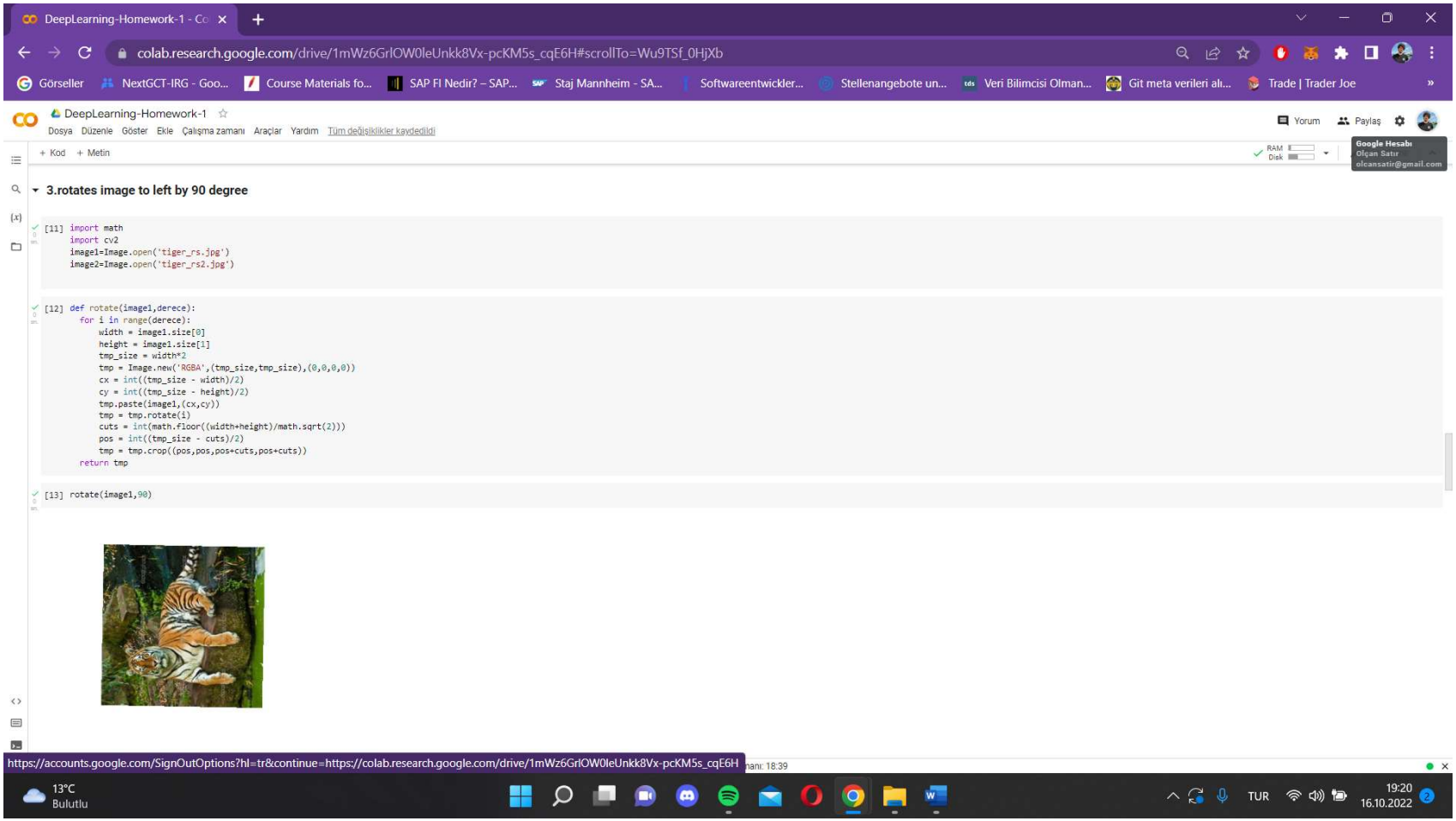
In the image, above and in this image, we print the resized versions. As well as we flips image1 vertically.



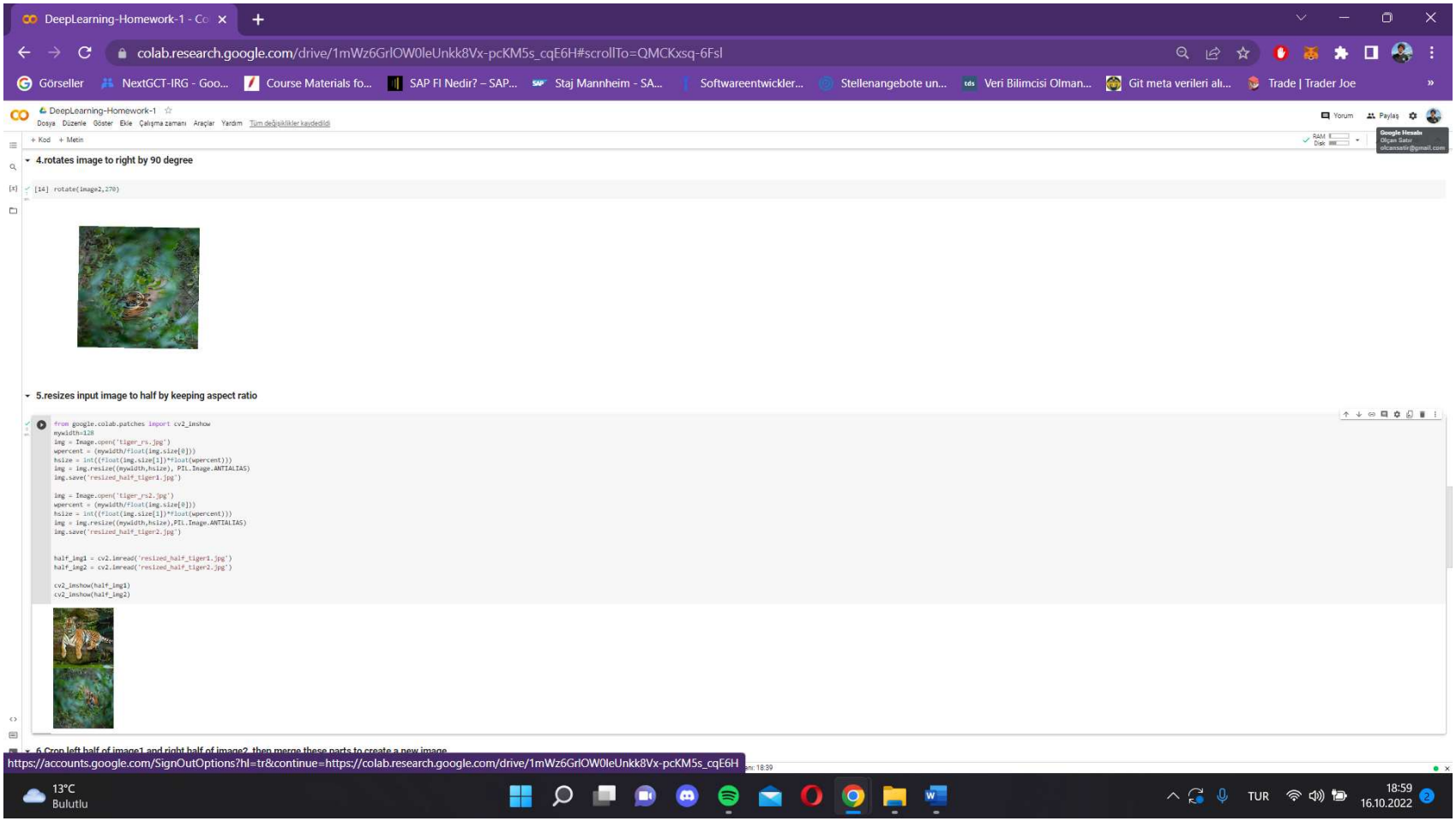
In this image, we flips image1 vertically.



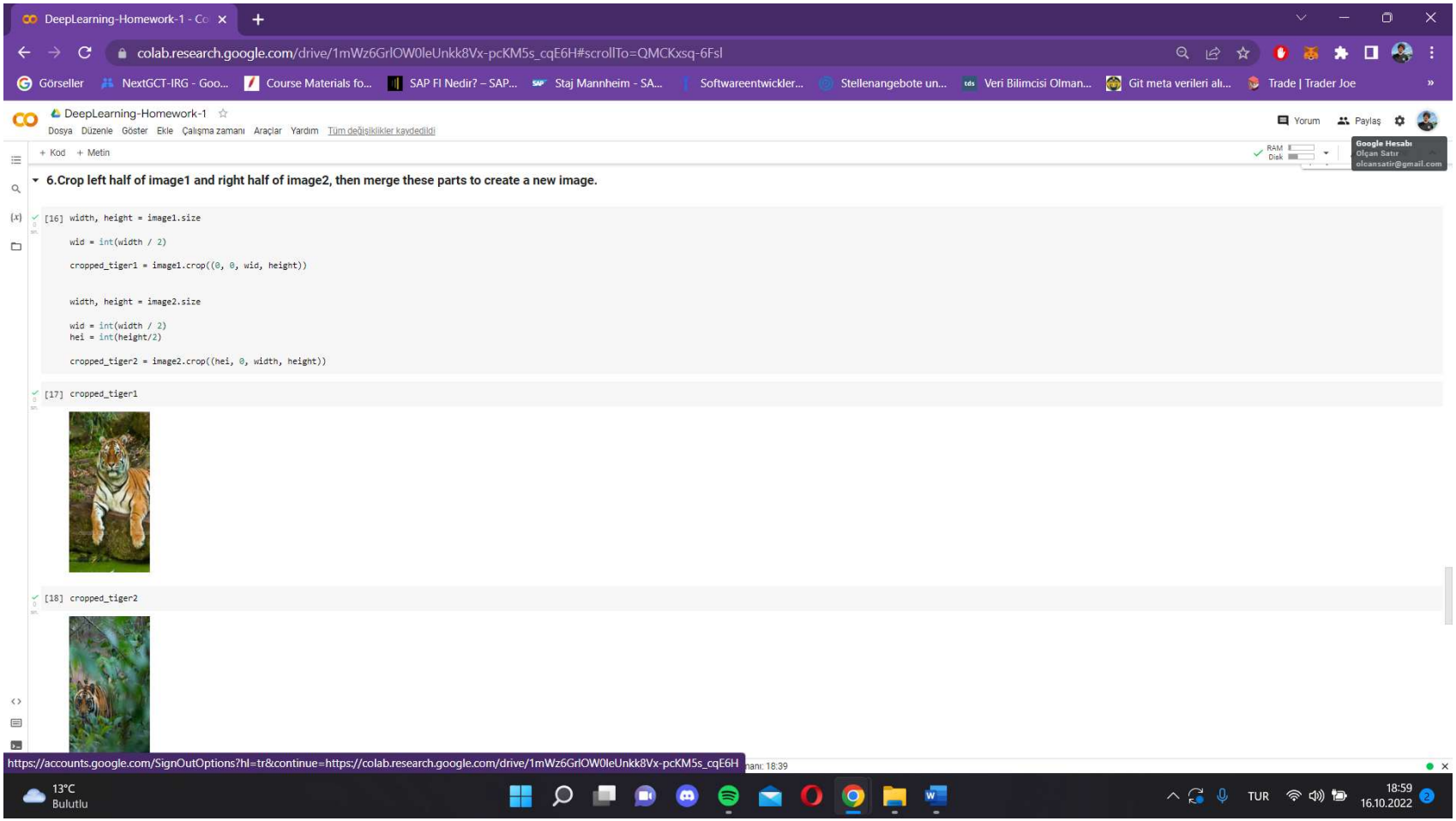
In this image, we turn image1 90 degrees to the left.



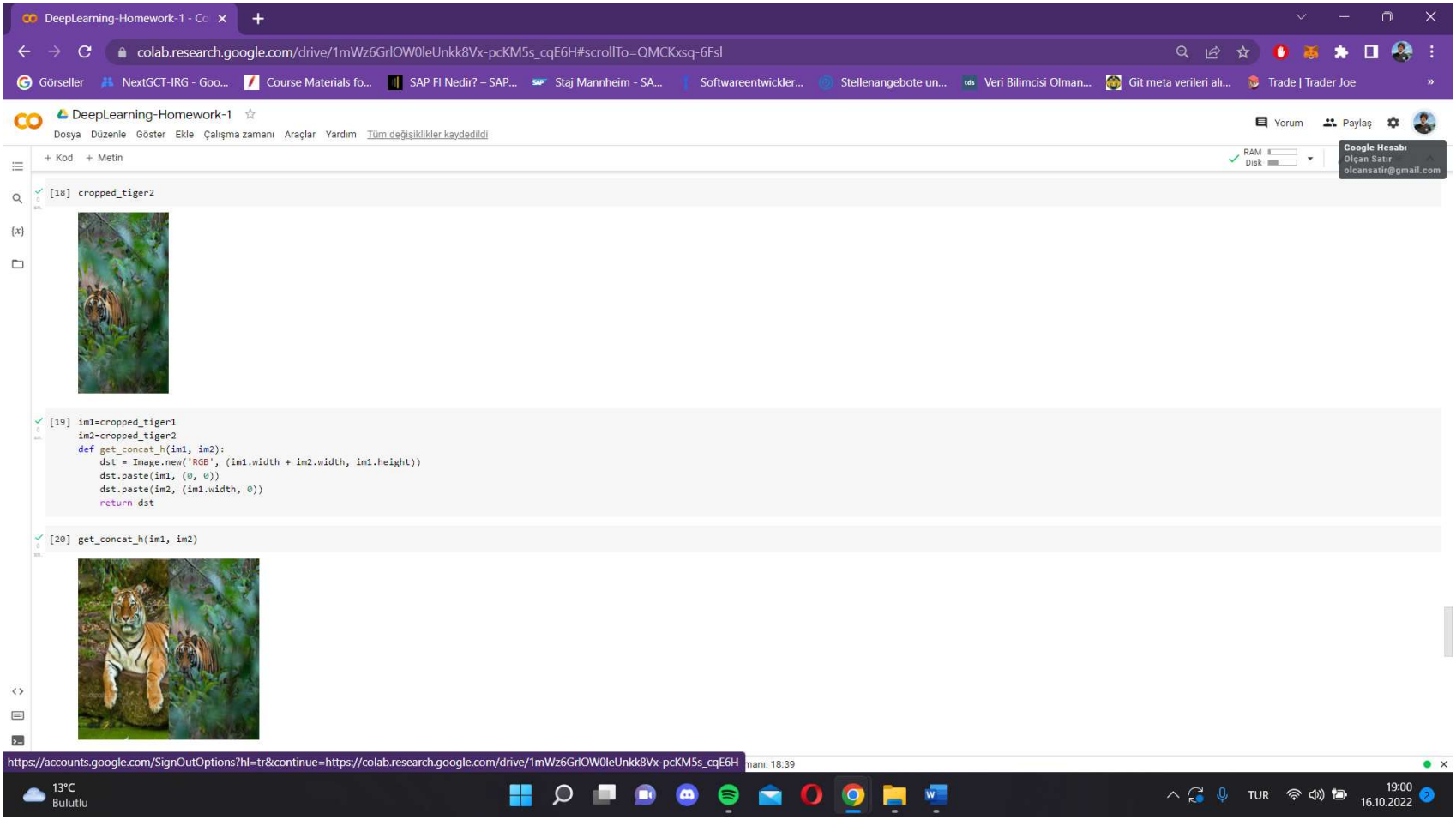
In this image, to rotate image2 90 degrees to the left, we give the function the value 270.



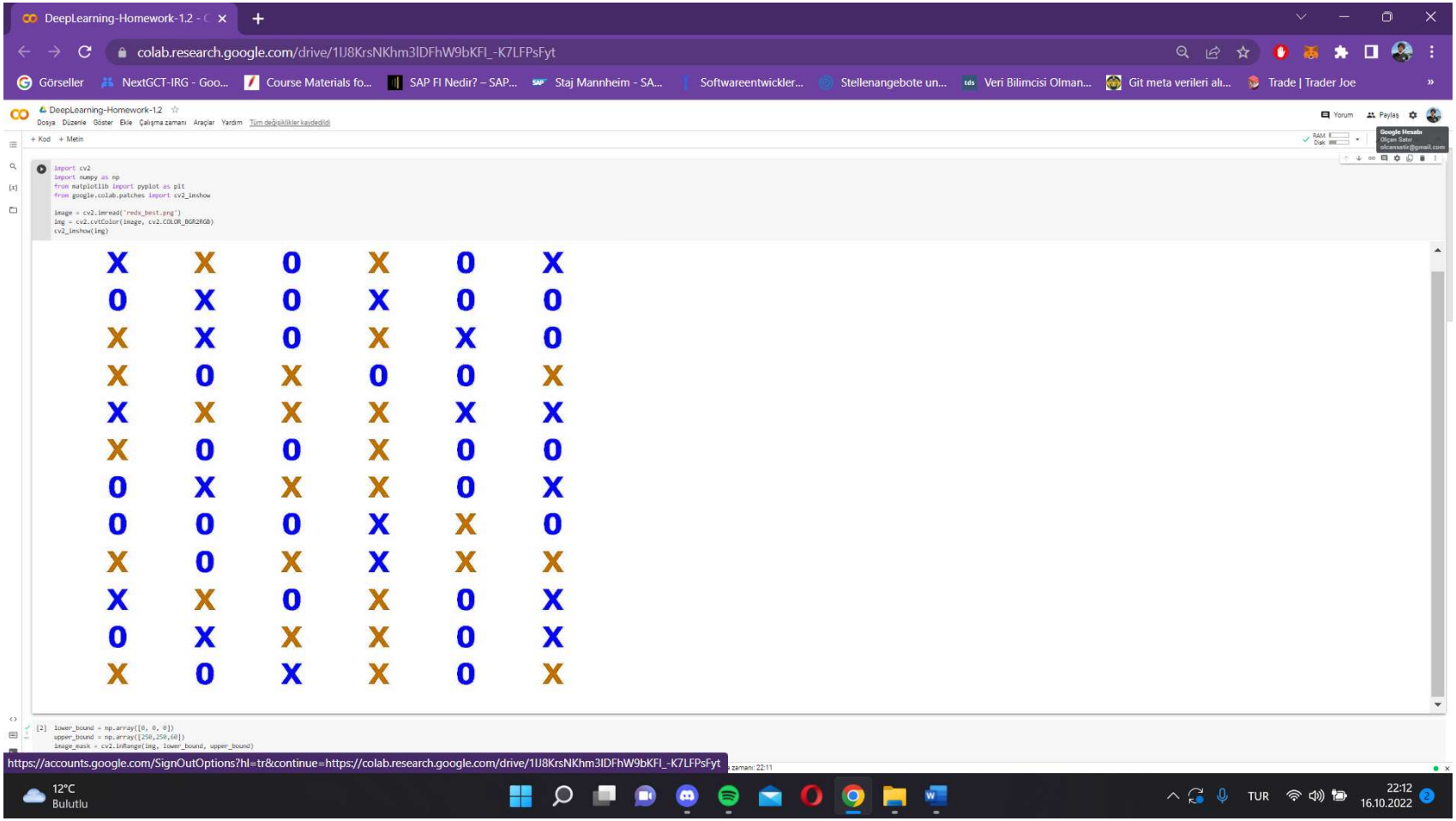
In this image, we cut out image1 to get the left half and cut out image2 to get the right half. We print these images.



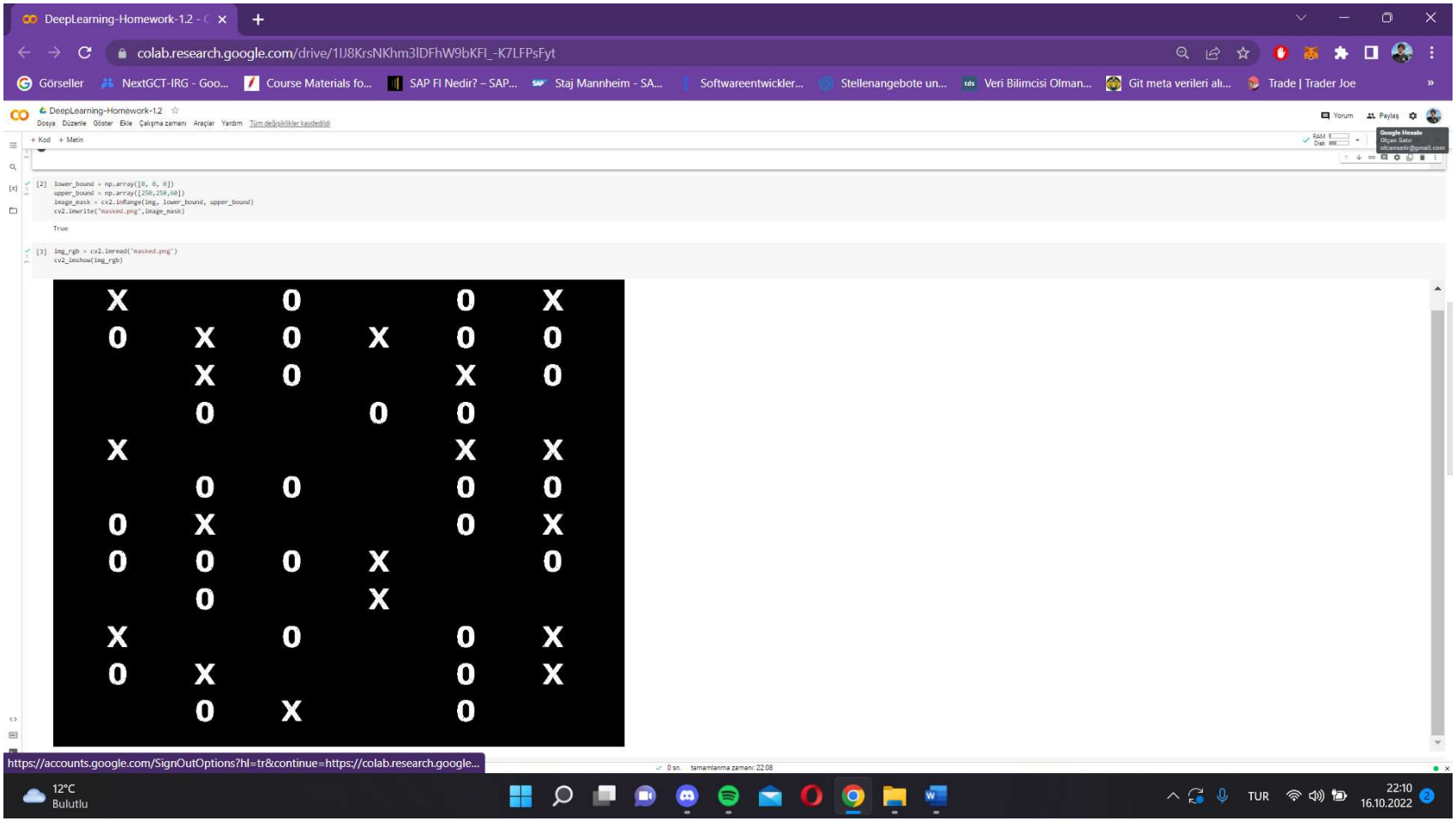
In this image, we combine the half pictures we cut and print them as a single picture with the help of the function.



Question 2: In this image, we convert our image from BGR to RGB and show it.

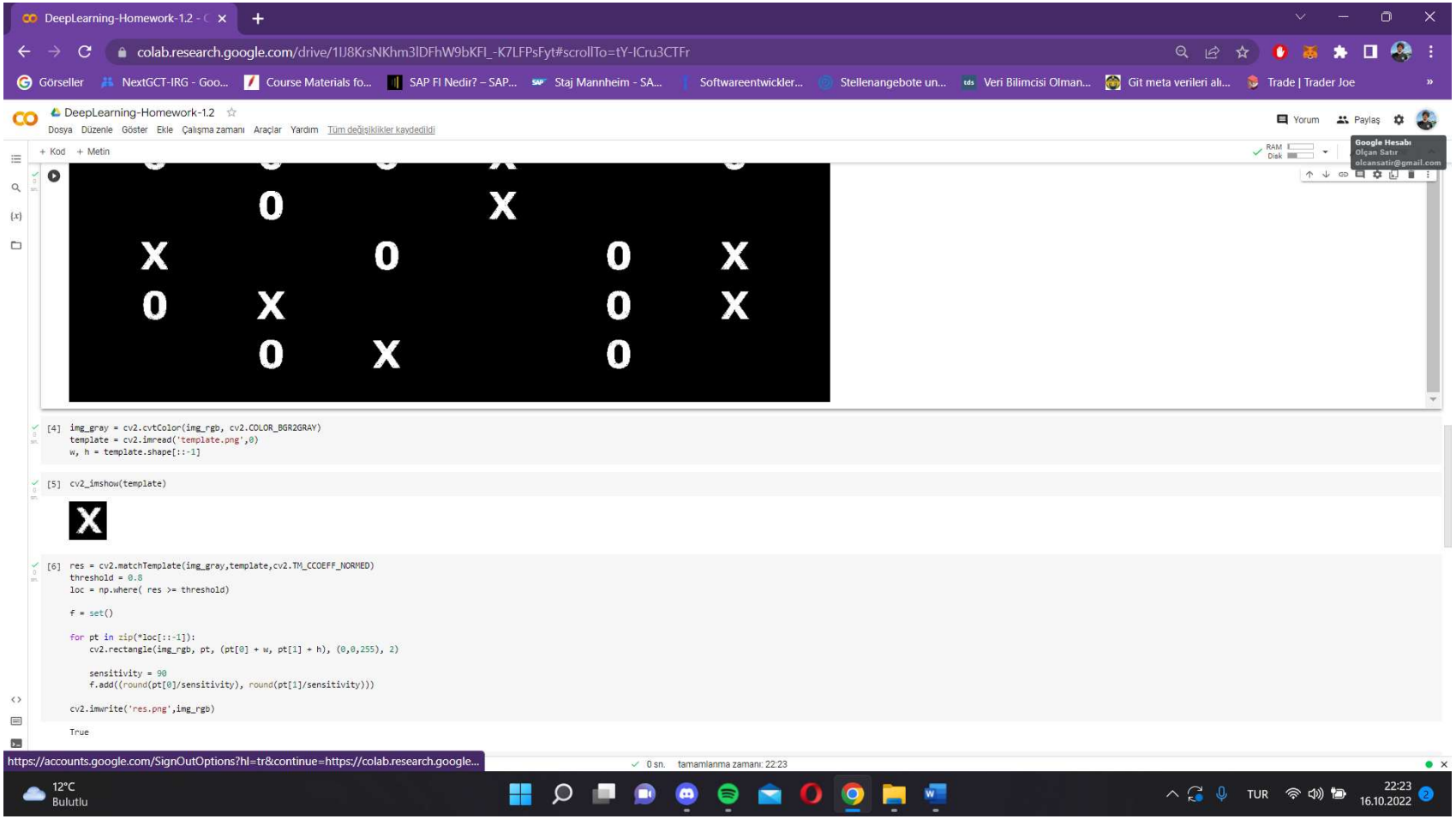


In this image, we mask and show our image.

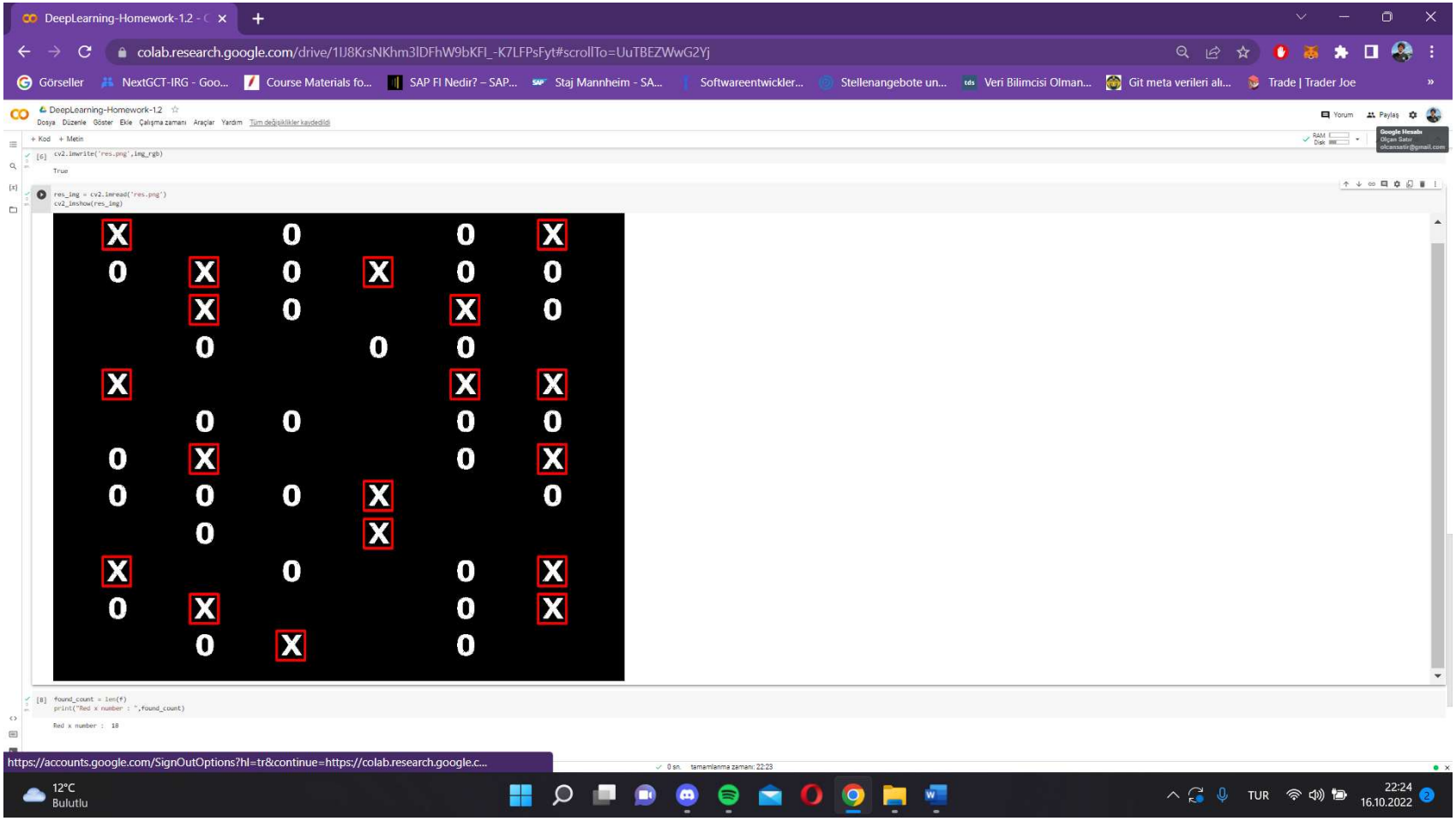


In this image, we convert our image to grayscale and then define the image we will search in the image as the template.

We give the Threshold value as 0.8, if it achieves 80% or more similarity, it is included in the cluster.



In this image, we see that there are those with a similarity rate of over 80%. These are included in the cluster and the total number of elements of the cluster is suppressed. We see that there are 18 red X in total.




```
[8]  found_count = len(f)
     print("Red x number : ",found_count)

     Red x number :  18
```