**NEURAL STYLE TRANSFER**

**Which model ?**

VGG19.[ Visual Geometry Group]

19 layers are required-

1.Finding patterns.

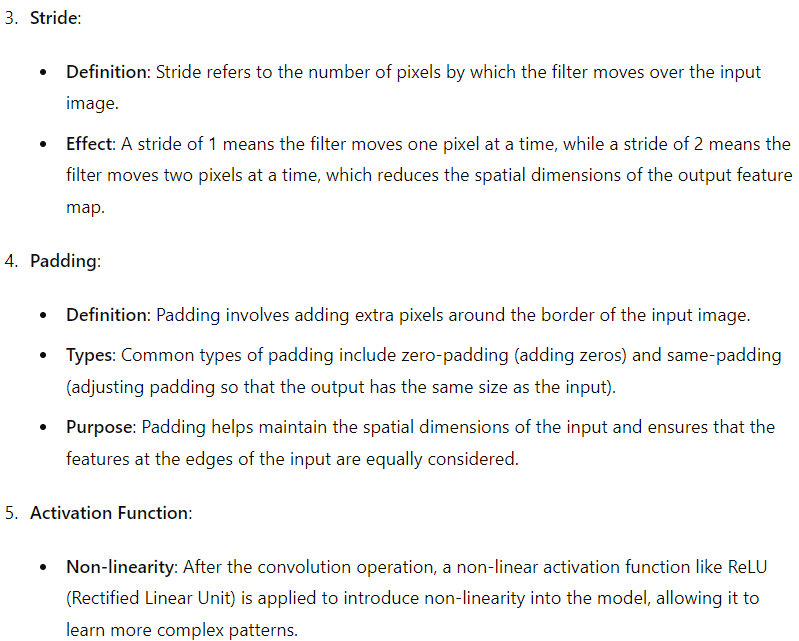
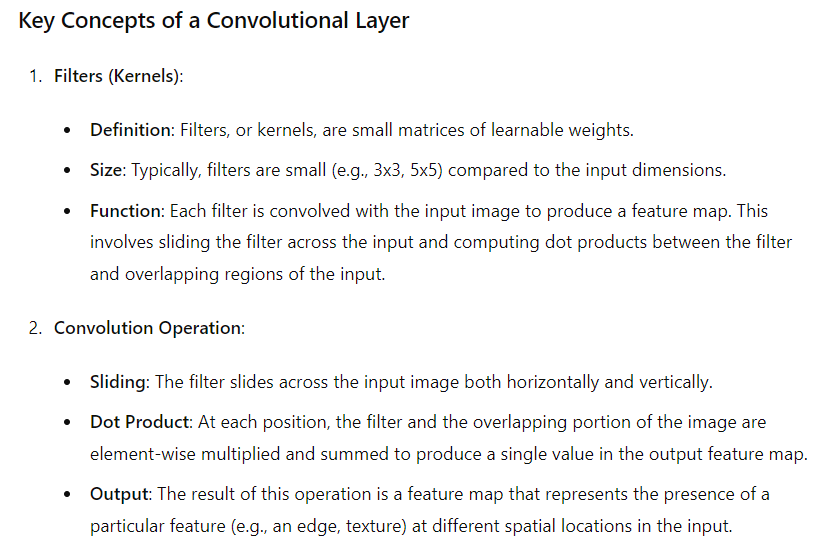
2.More layers == better representations

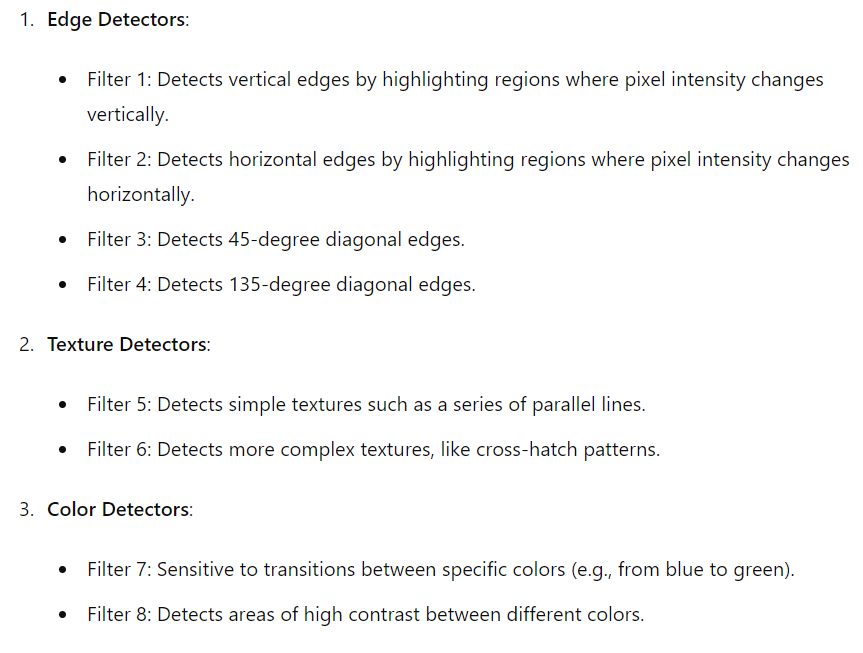
3.Finding better features

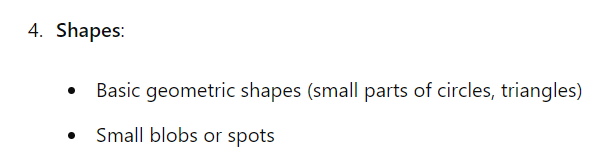
**Feature Robustness**: Multiple layers help in creating robust feature representations that are less sensitive to variations such as noise, distortions, and changes in lighting

4.Gradual increase in context.

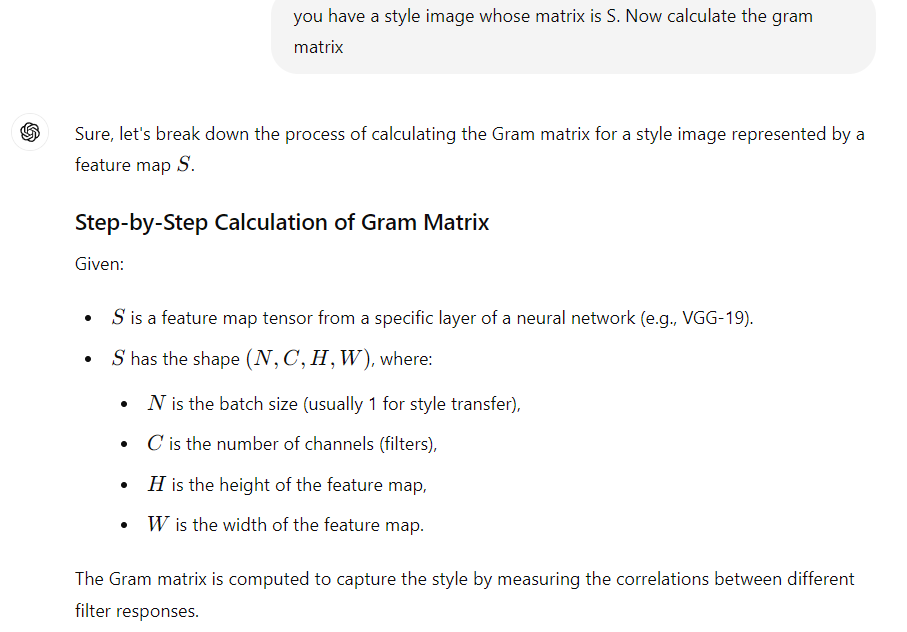
5.Handling variations in data.

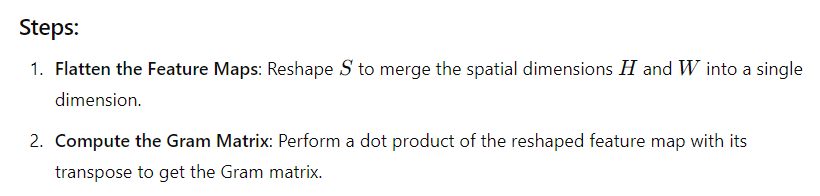


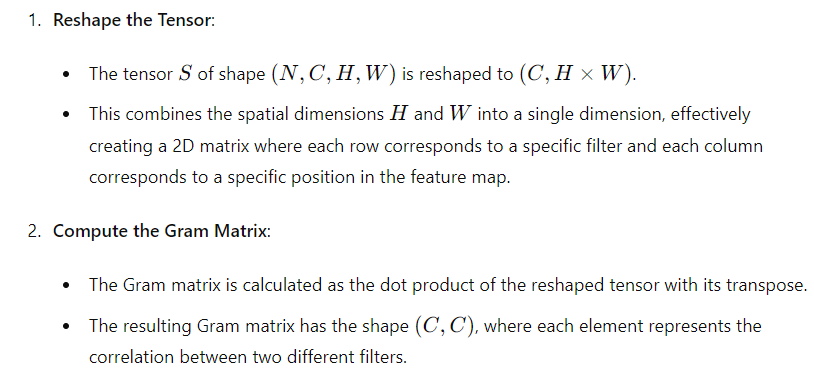


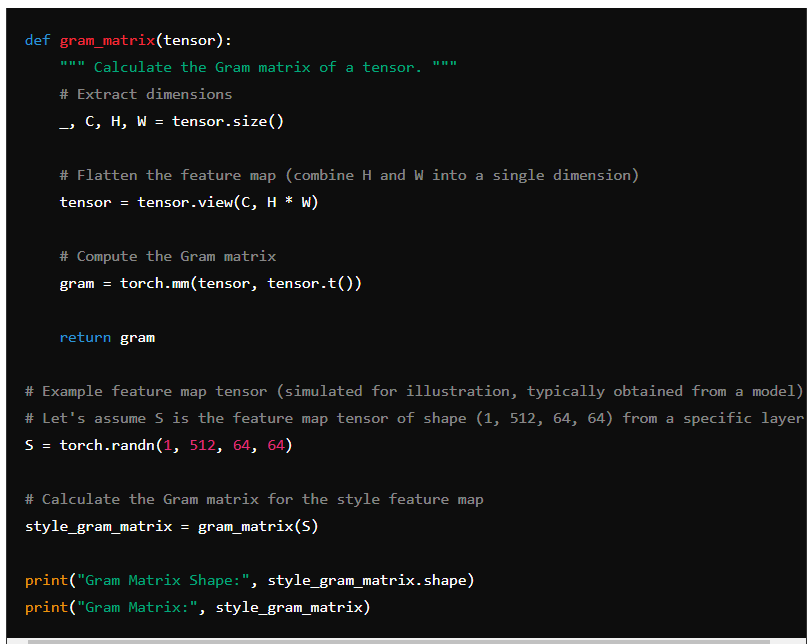


**GRAM MATRIX**

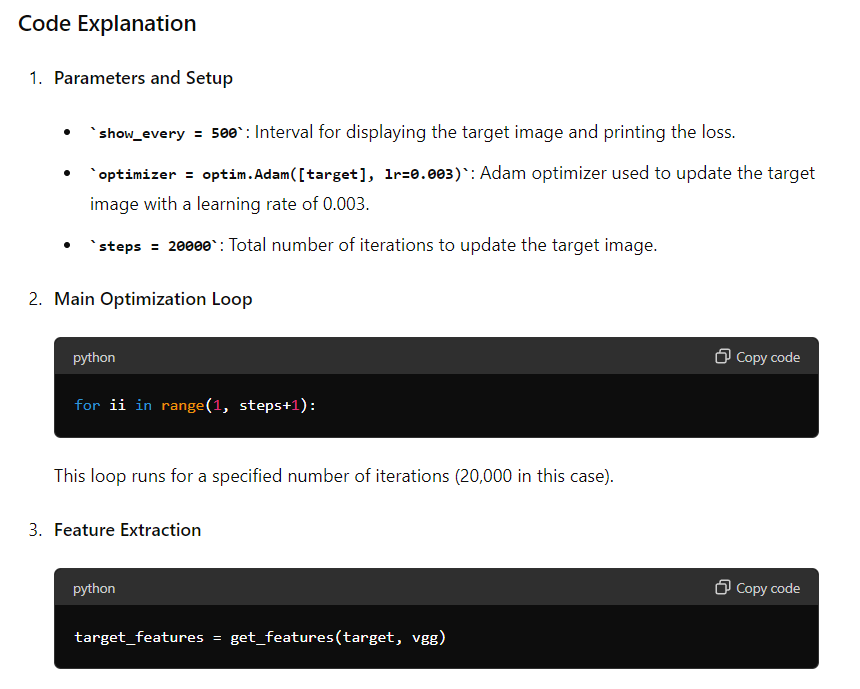


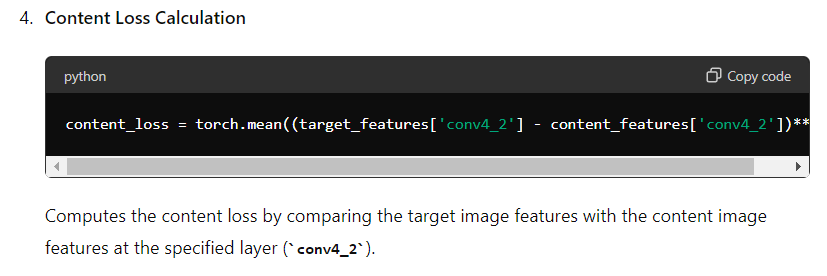


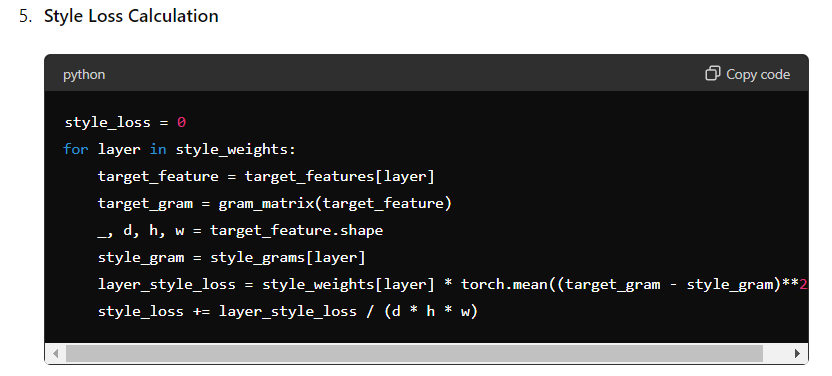


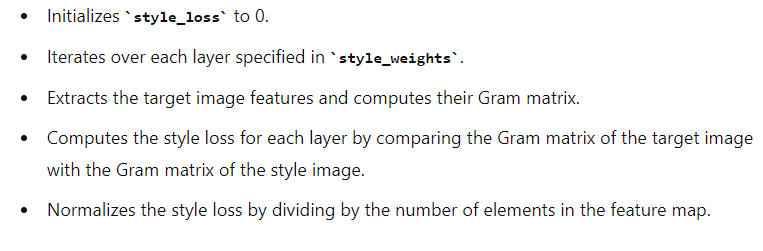


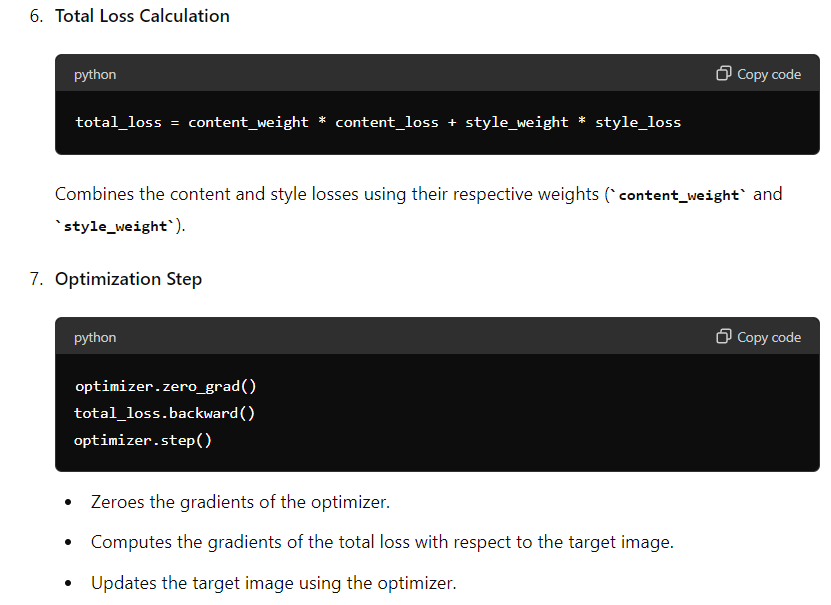
**TRAINING PART.[Where the pixels of the target image are changed]**

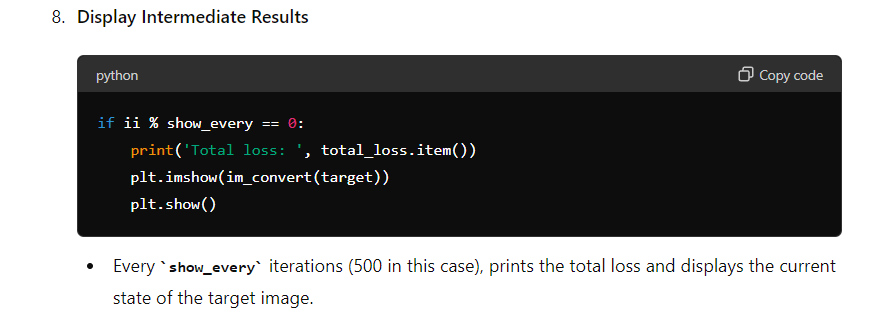


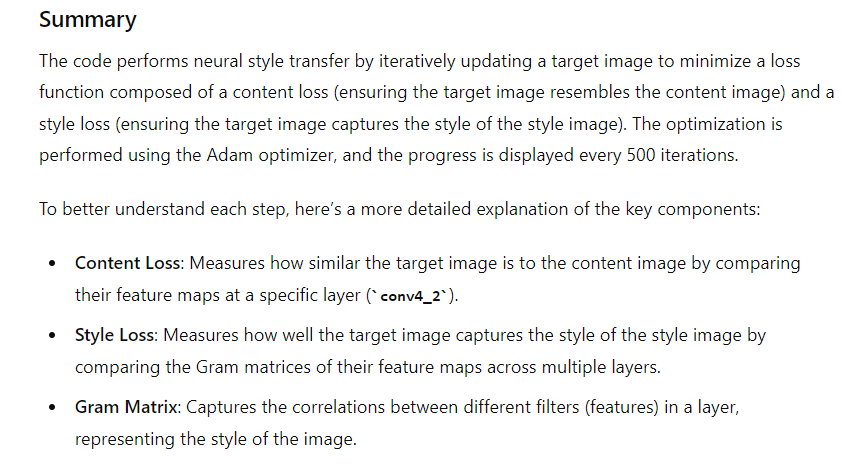


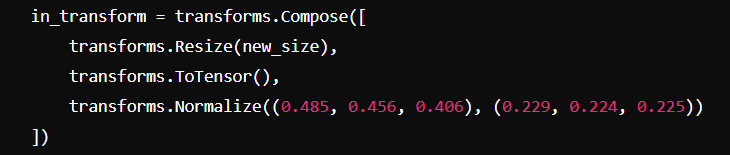


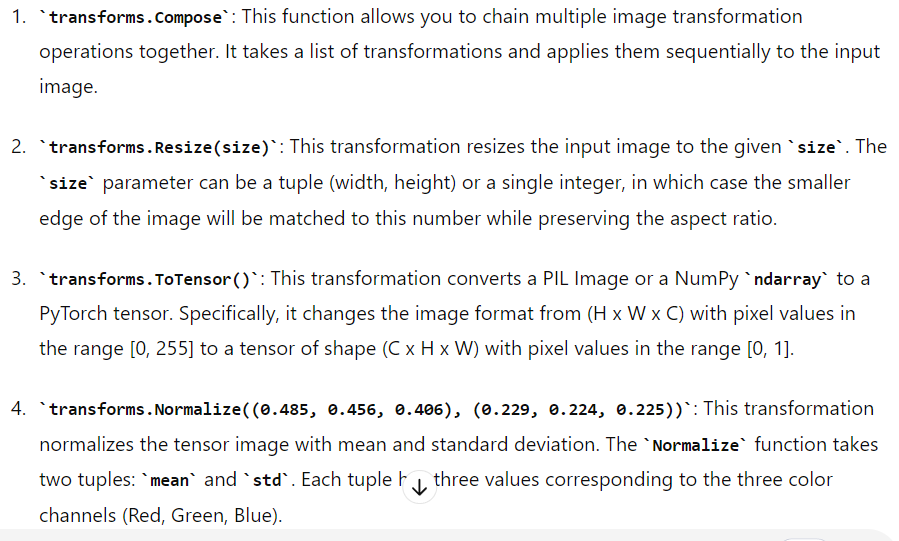


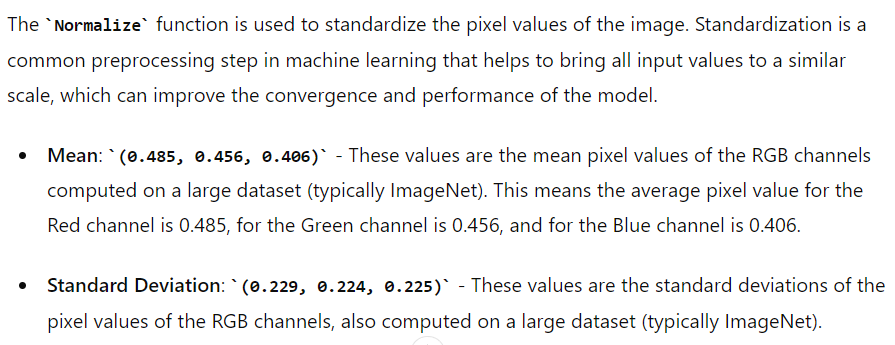


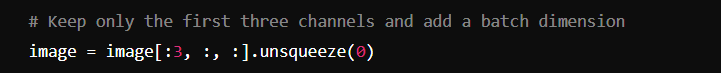


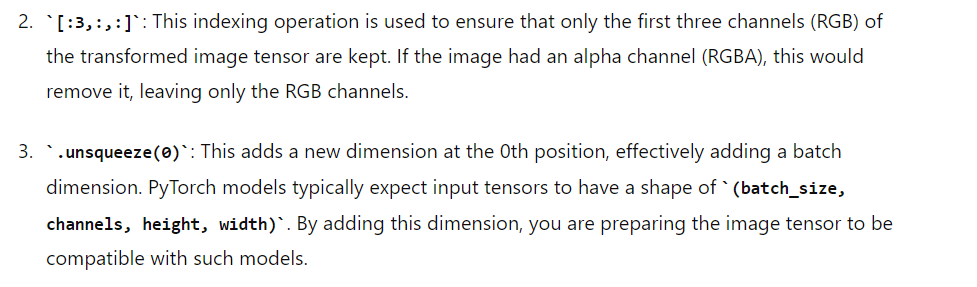












If my dimension is 450 \* 250 \*3 what will the resize function do:-

