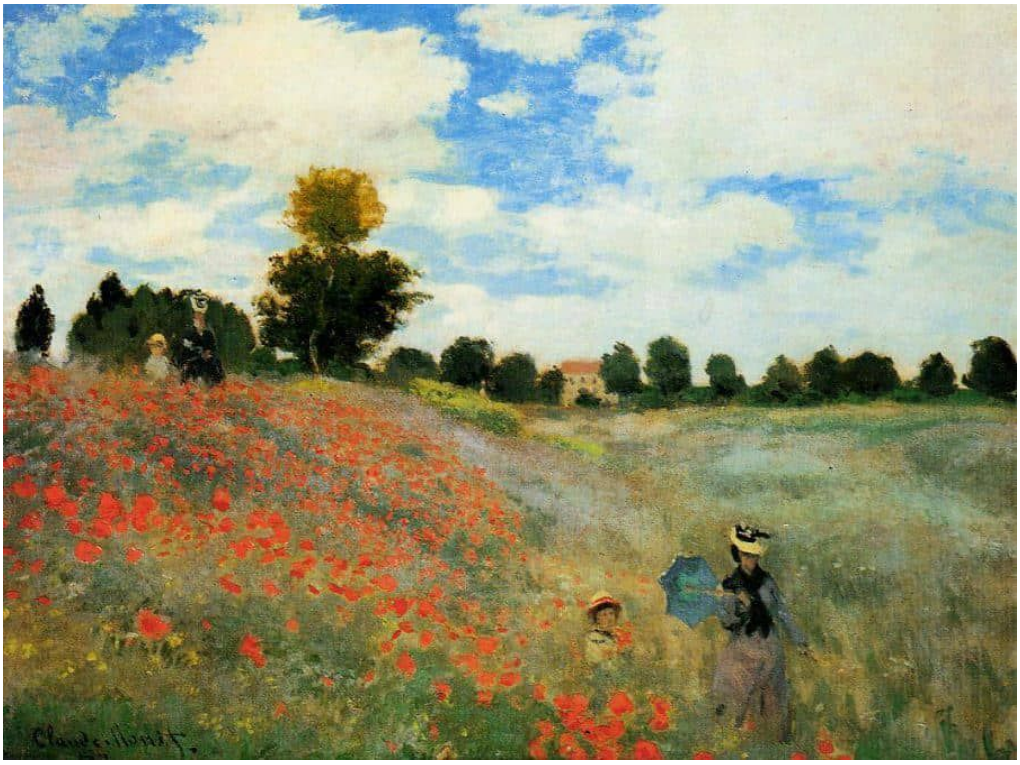
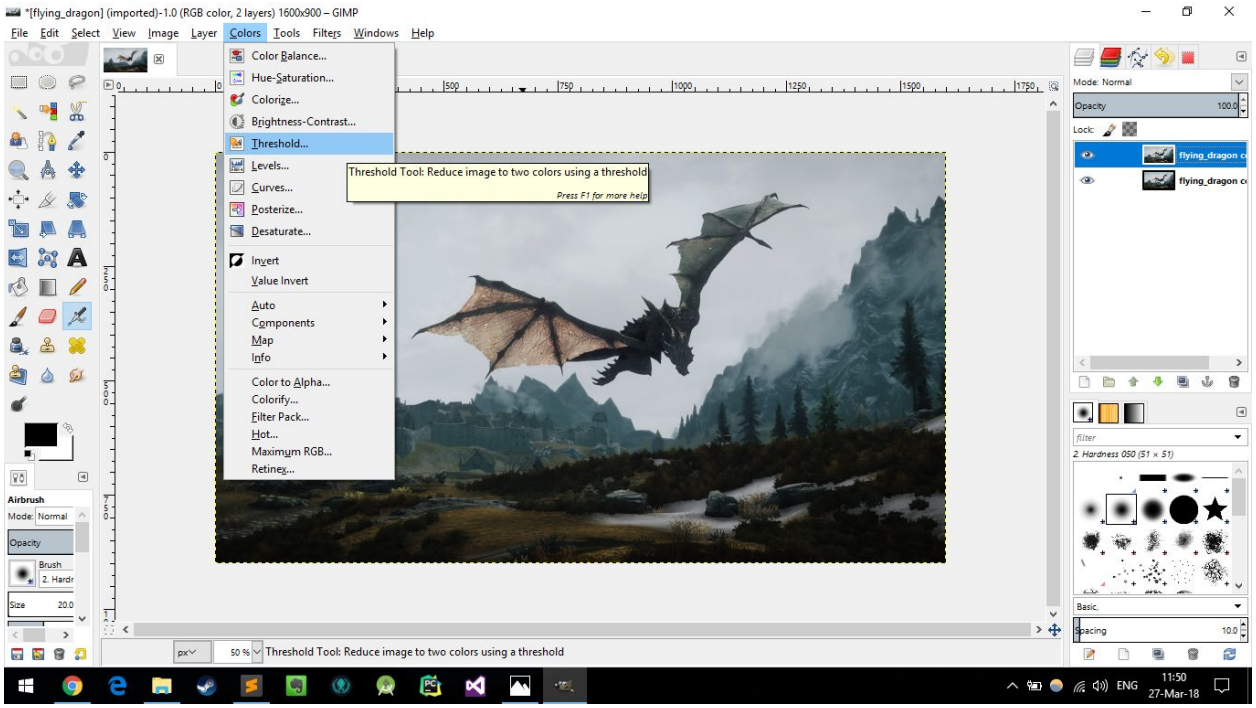
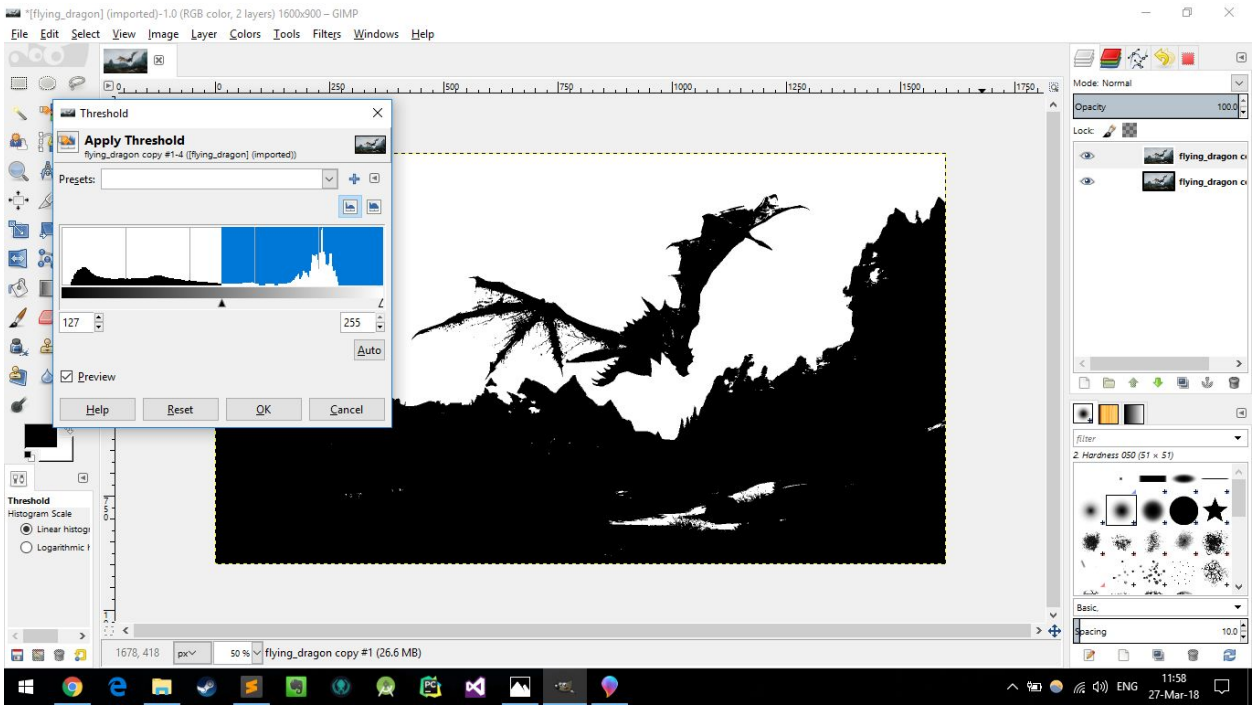
Tehnici programare aplicaţii grafice - Tema 2

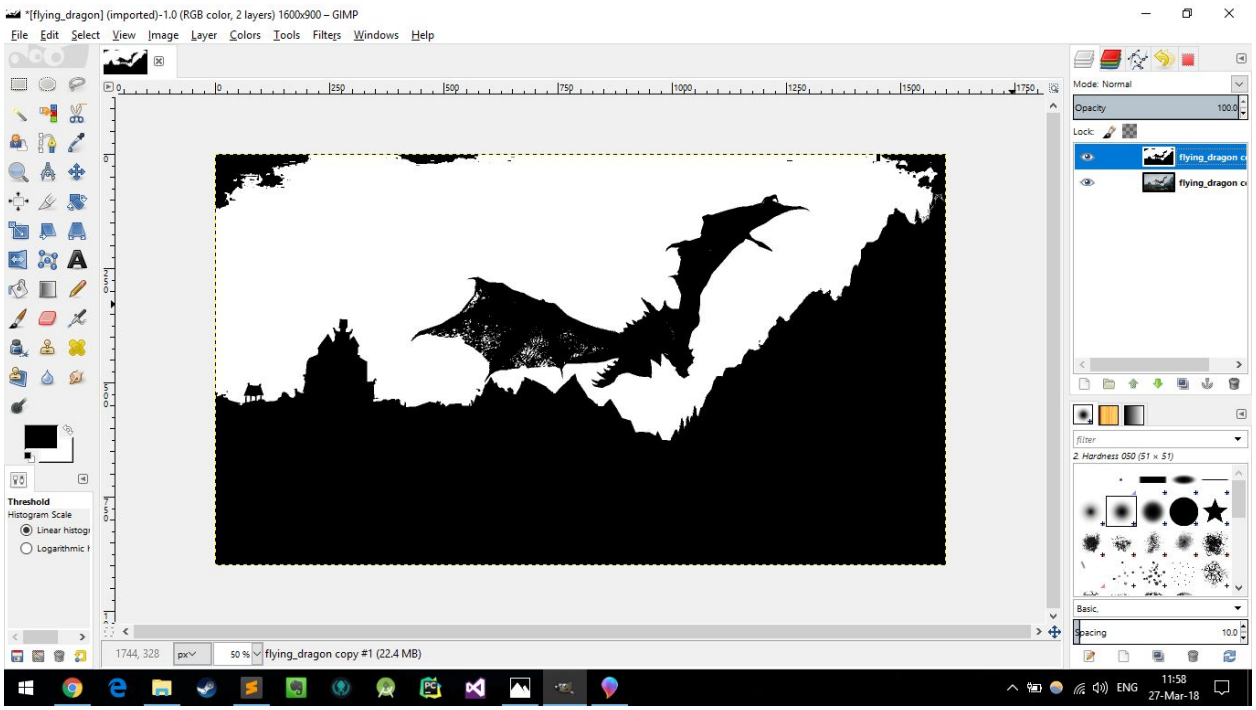
Exercitiul 1



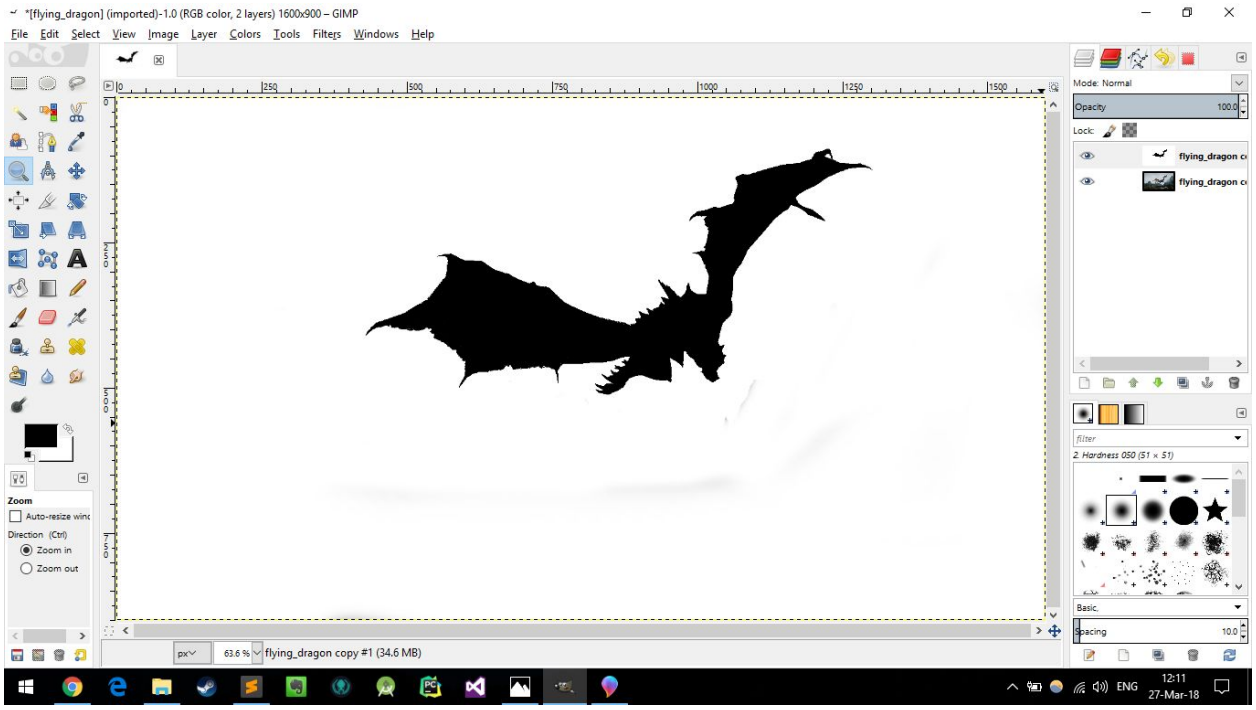




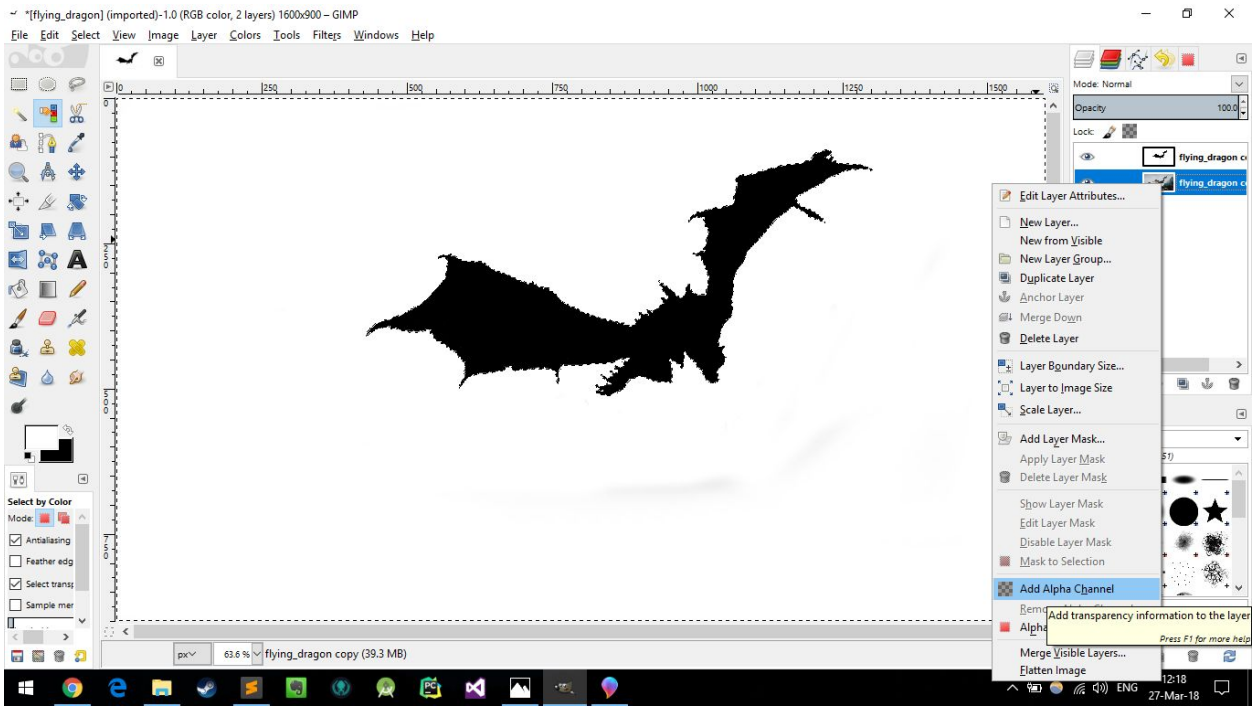
To achieve that, I first made a duplicate layer, and then selected Color - Threshold to turn the image into a black and white image.



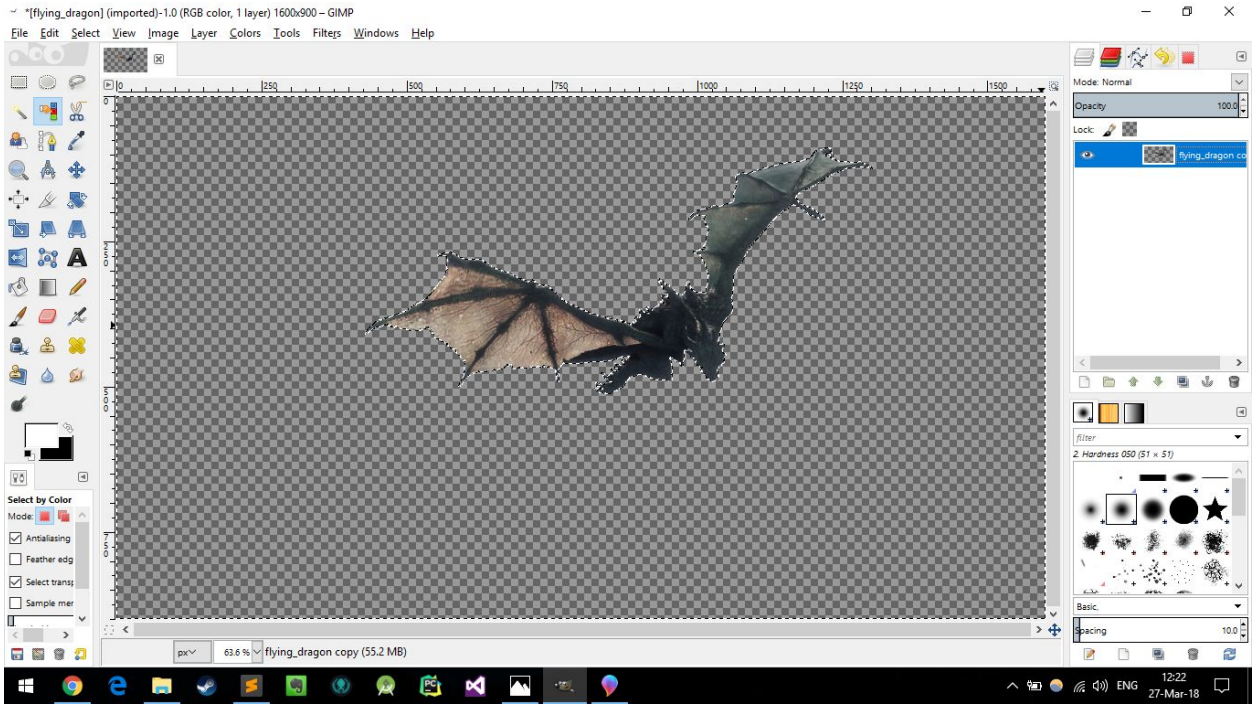
I then adjusted the slider to determine which colors are black and which are white to get a good contrast between the edges of the foreground and the background.



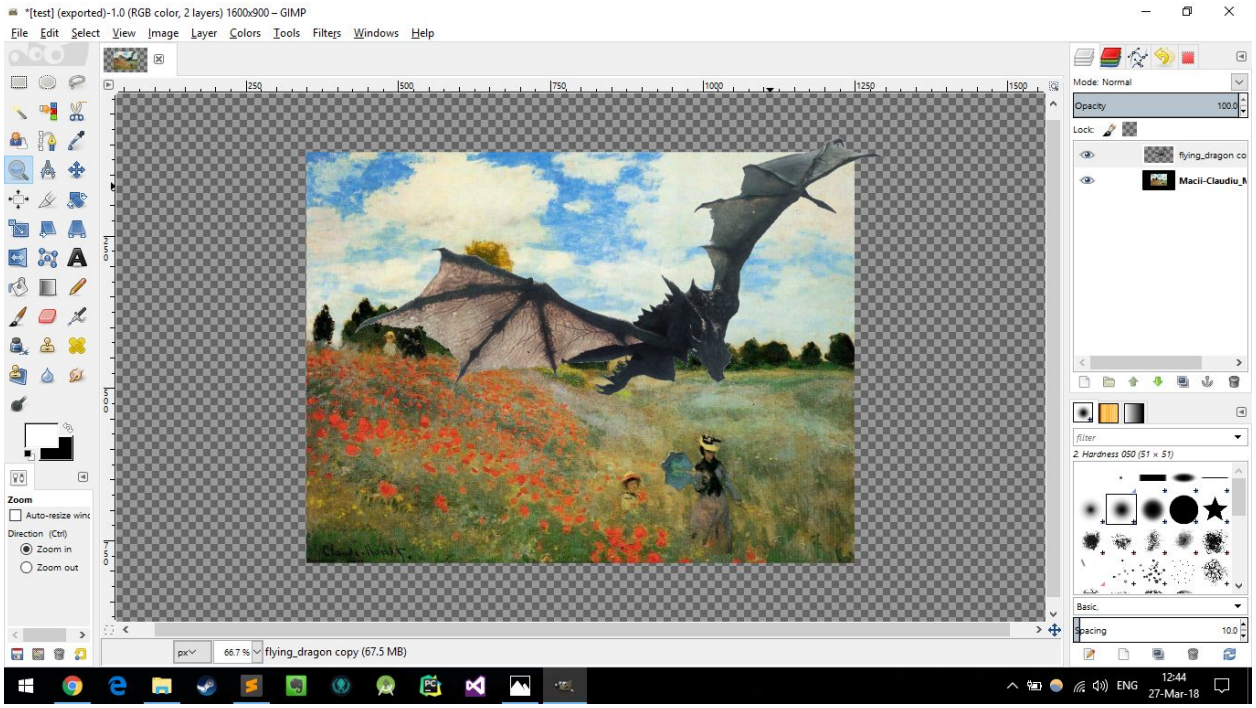
Then, with a brush, I made the foreground black and the background white.



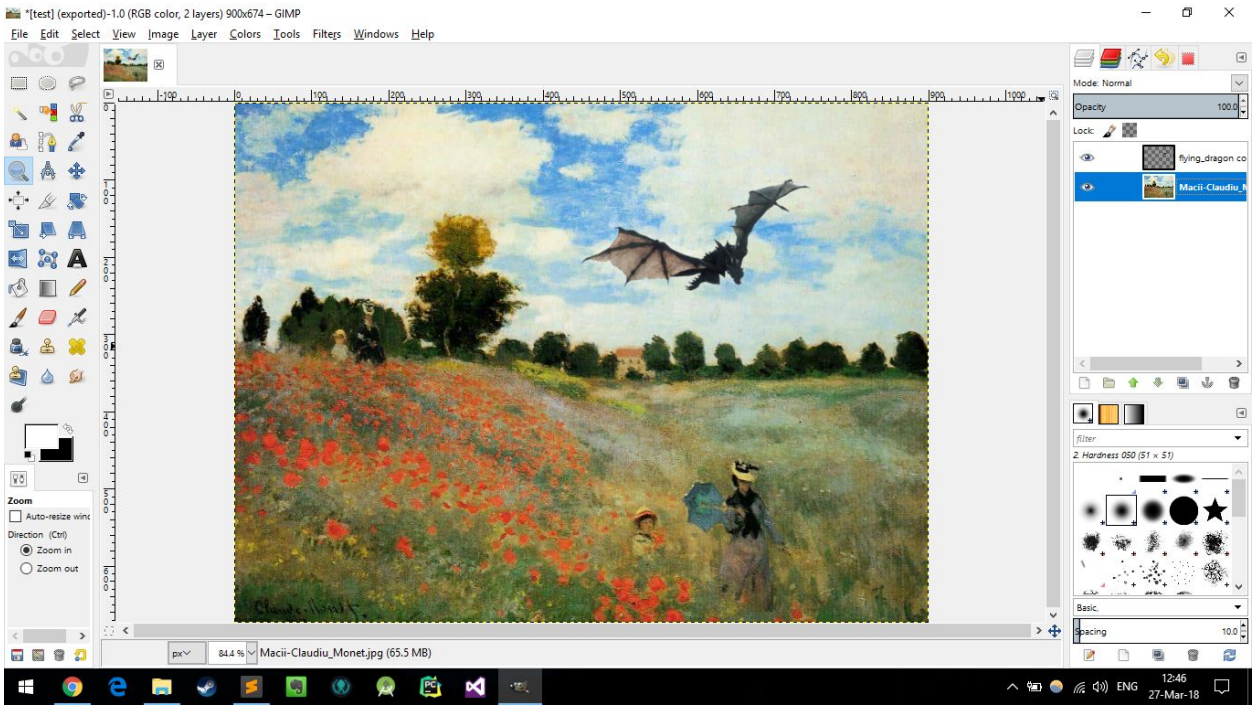
After selecting the white background on the second layer with the “Select by Color Tool”, I selected the background layer and added an alpha channel,



Now I deleted the selected background and the second layer that I no longer need.



Added a painting (Poppies - Claude Monet) as a background layer.



Scaled and moved the dragon layer, then cropped out the transparent padding.

Exercitiul 2

Converted the RGB image to grayscale. I used a fast Fourier Transform algorithm on the image matrix, in Matlab, and then I filtered the resulting matrix by only keeping higher frequencies. After using the inverse Fourier Transform on the filtered matrix, the resulting image consists of the detected edges.

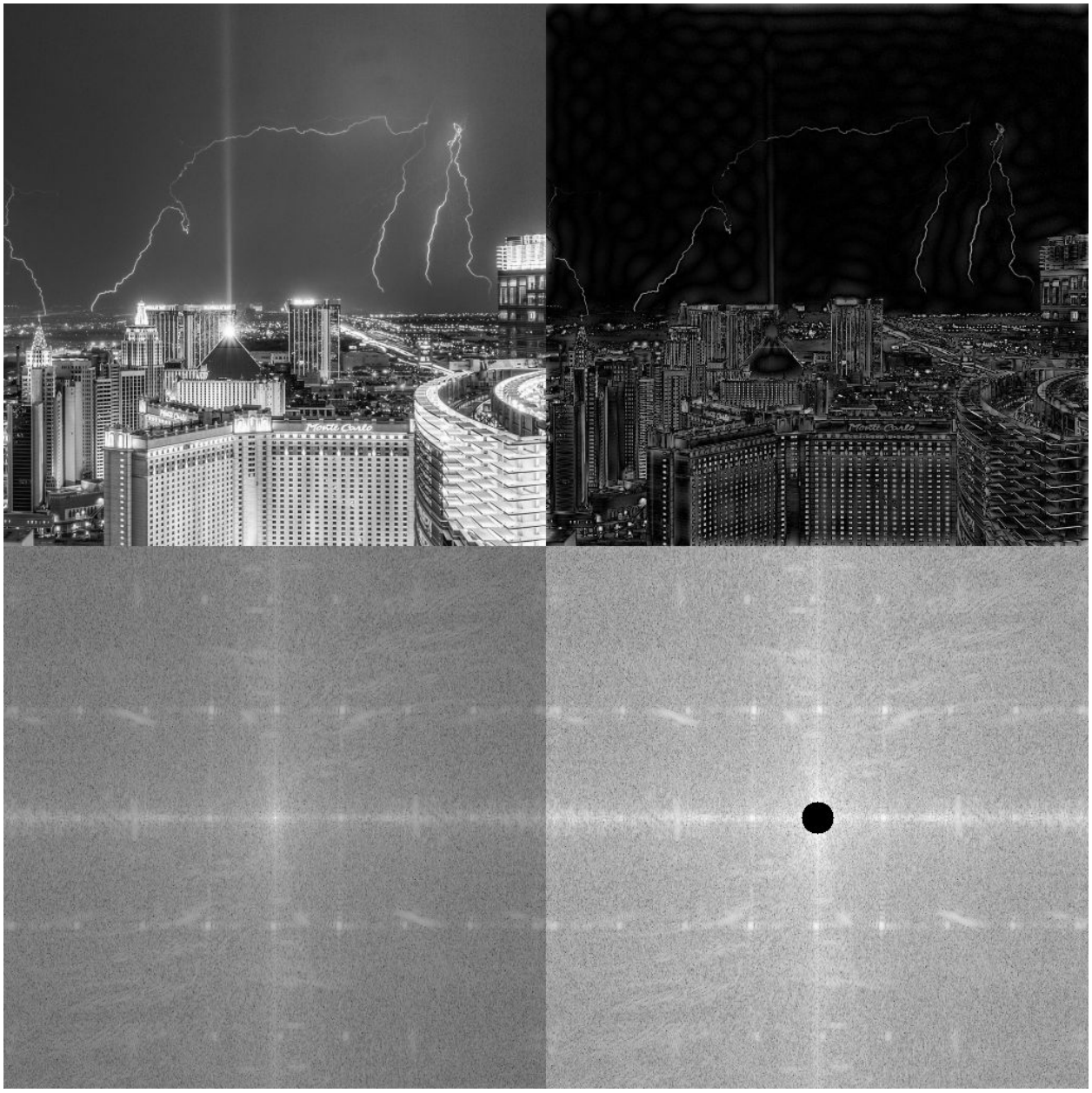

Monte Carlo
Monte Carlo

Image sources:

Poppies - Claude Monet:
https://www.claude-monet.com/the-poppy-field.jsp#prettyPhoto

Flying dragon:
https://www.pinterest.co.uk/pin/511299363920615511/
https://i.pinimg.com/originals/86/cb/fb/86cbfbc051e23588dea48f3ec1e853c3.jpg

Las Vegas lightnings:
http://wallpaperswide.com/las_vegas_lightnings-wallpapers.html