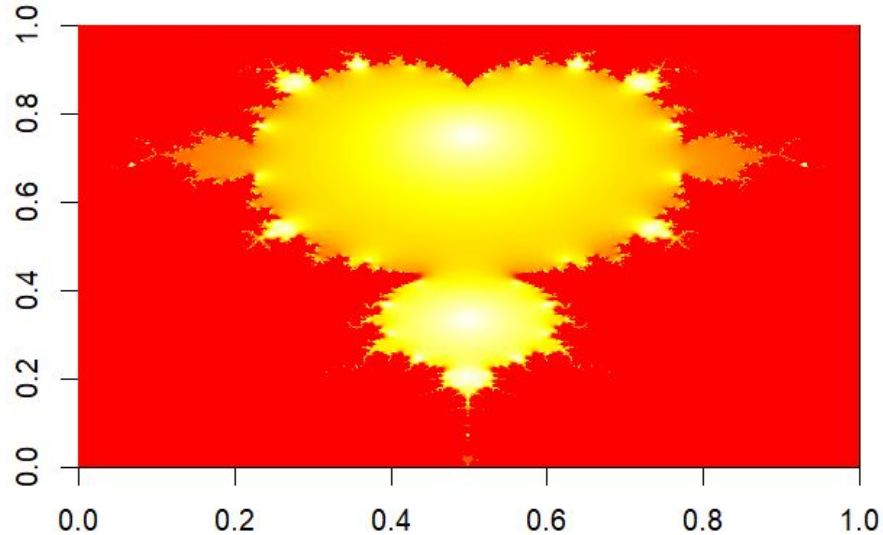


Lab 1 Report

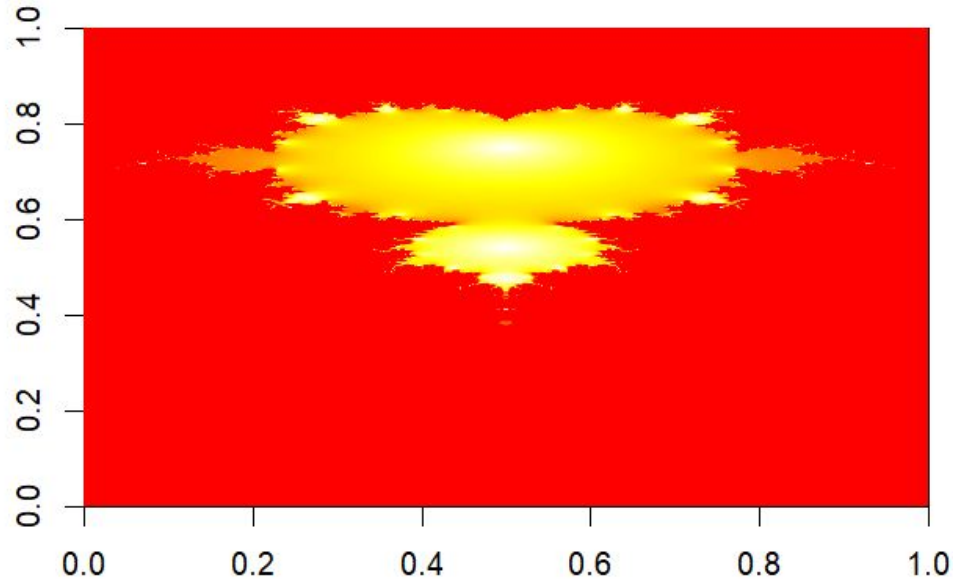
Talha Hamza

1. Change the dim parameter to 1000.



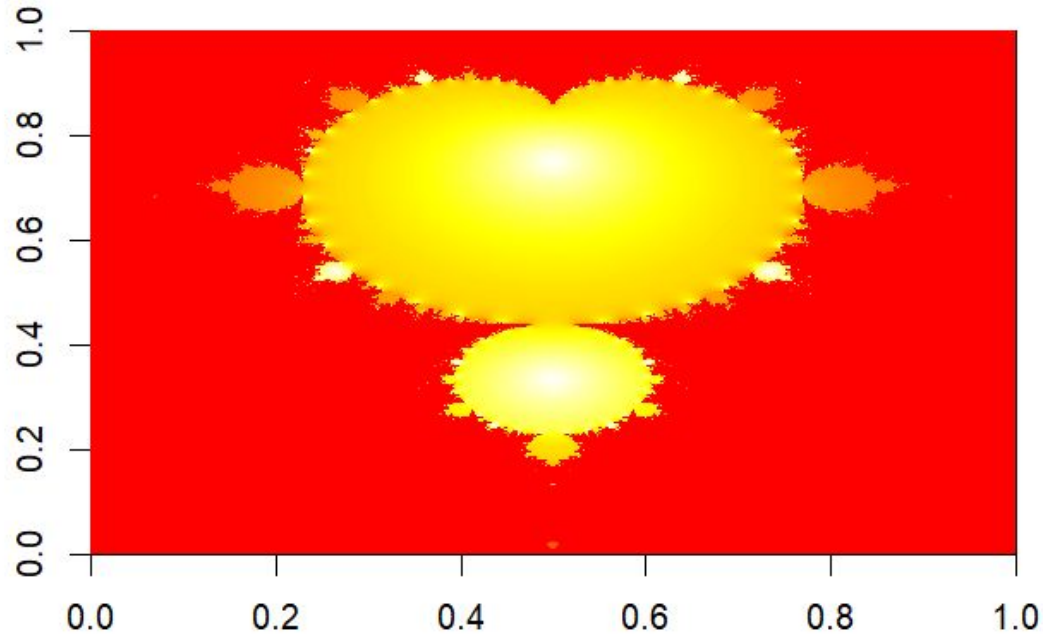
I did not observe any remarkable change relative to the original parameter of $\text{dim} = 500$

2. Change x_{lo} to -3.6 and x_{hi} to 1.2.



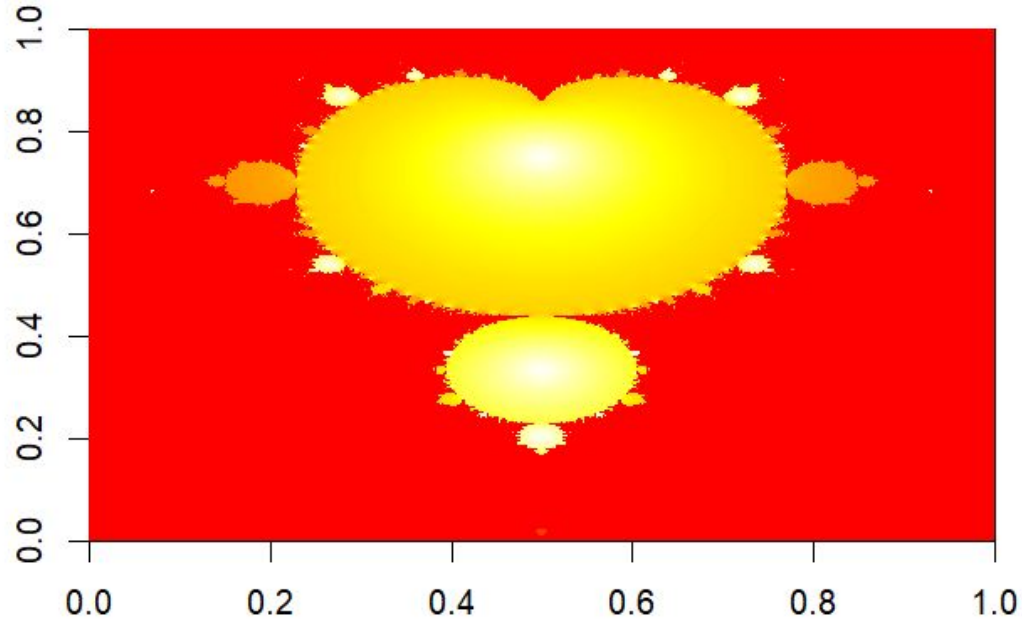
I observed the fractal shrunk vertically.

3a. Changing iter to 50



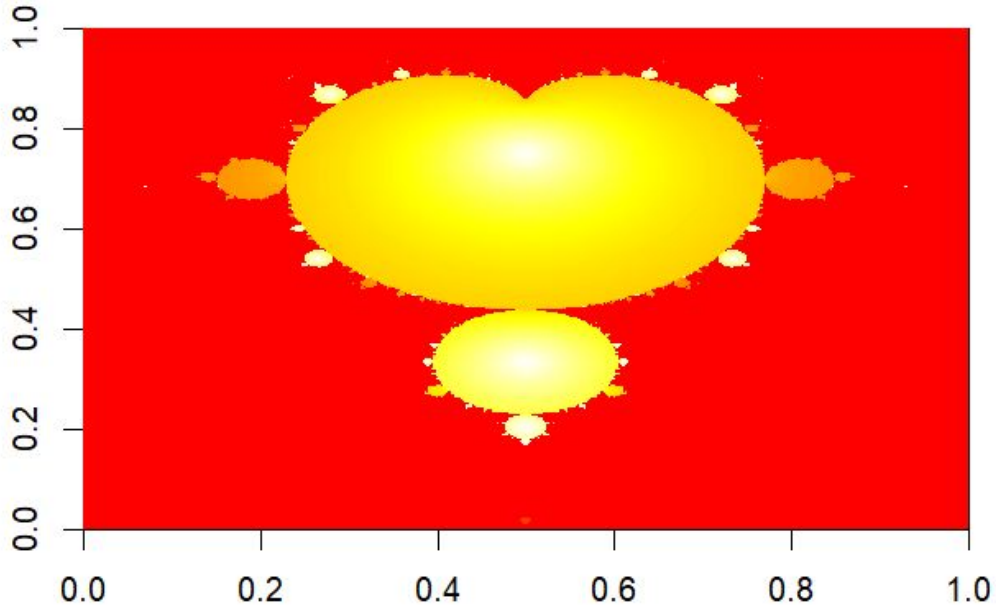
I observed that the fractal's edges have become smoother

3b. Changing iter to 100



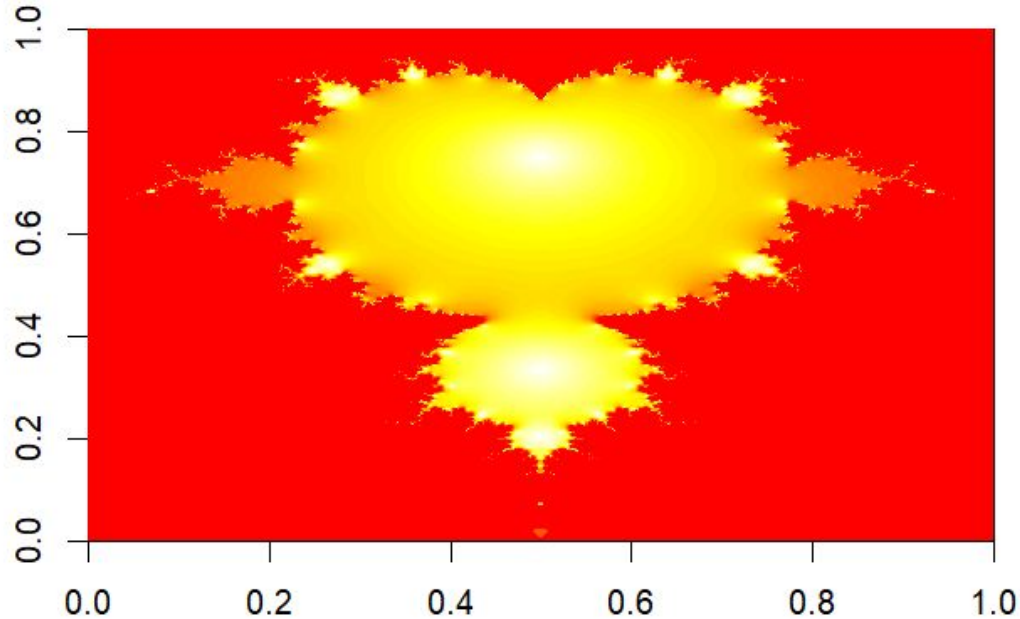
I observed that the fractal's edges have become smoother, and the top two branches have changed color from orange to yellow

3c. Changing iter to 1000



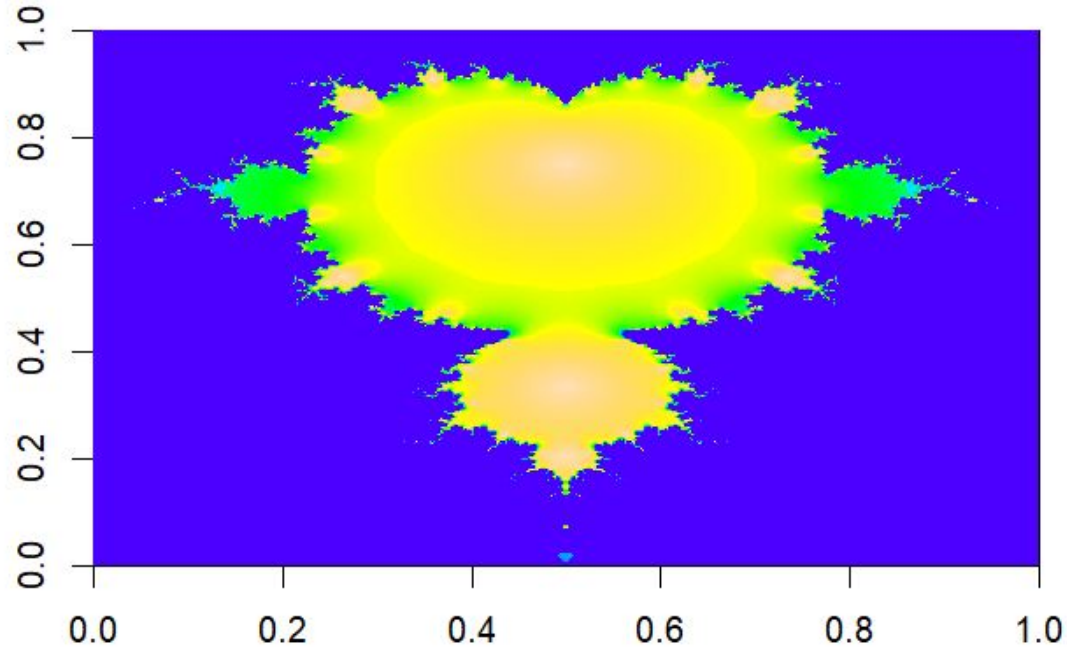
I observed that the fractal's edges have become smoother

4 Changing `heat.color(50)`



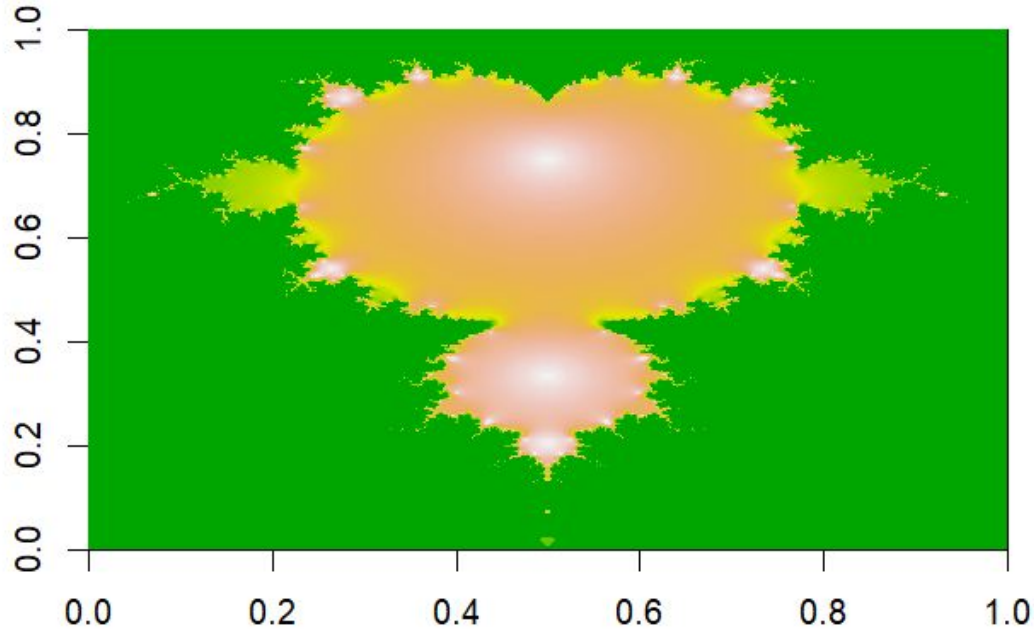
I see the center become more yellow as the `heat.color()` decreases

5a. Changing to topo.colors(100)



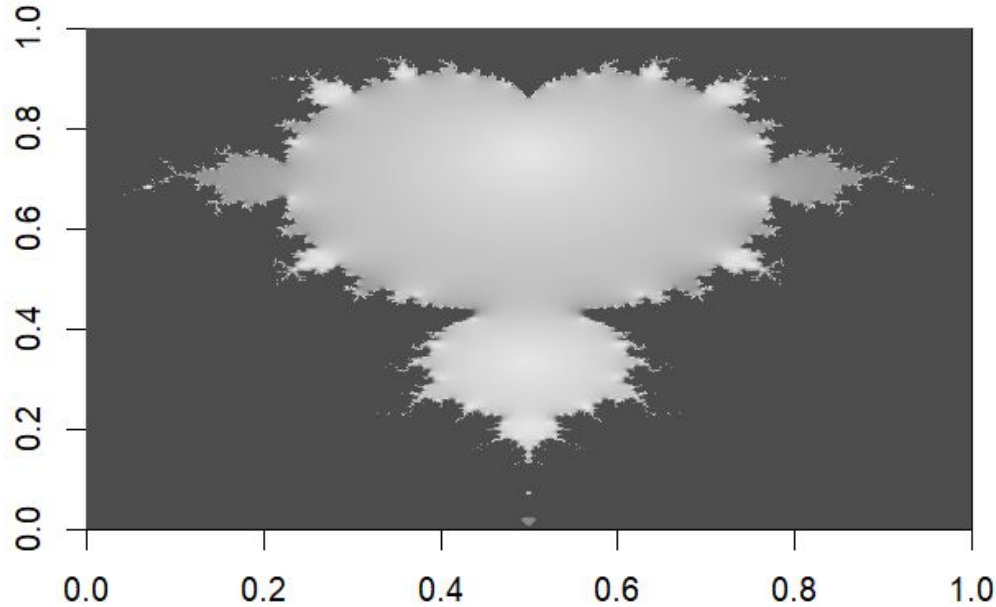
I see the color theme has changed from Red-Yellow, to Blue-Lime

5b. Changing to terrain.colors(100)



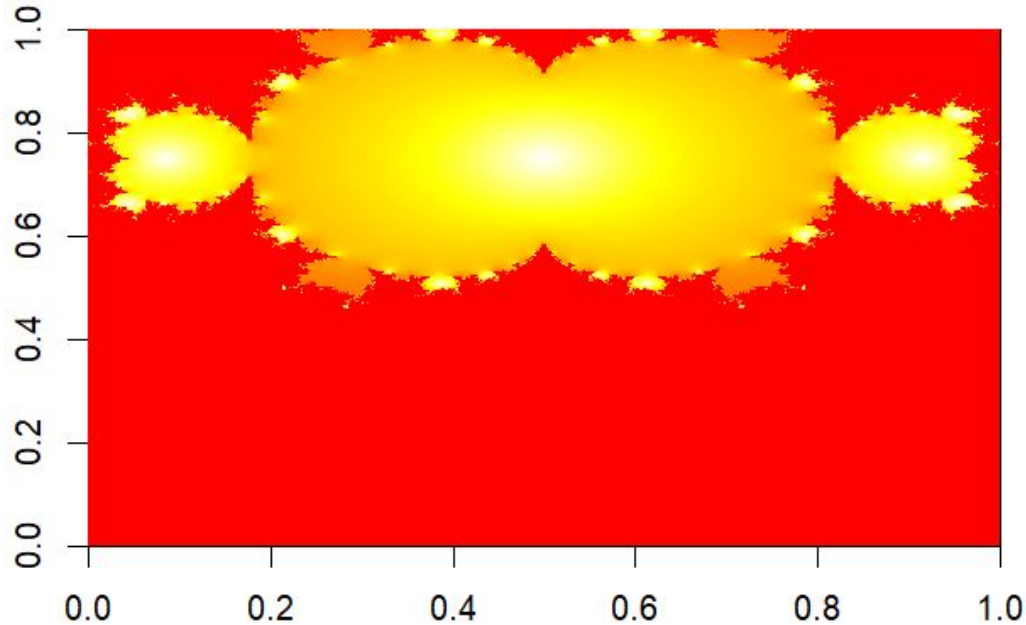
I see the color theme has changed from Red-Yellow, to Green-Pink

5c. Changing to `gray.colors(100)`



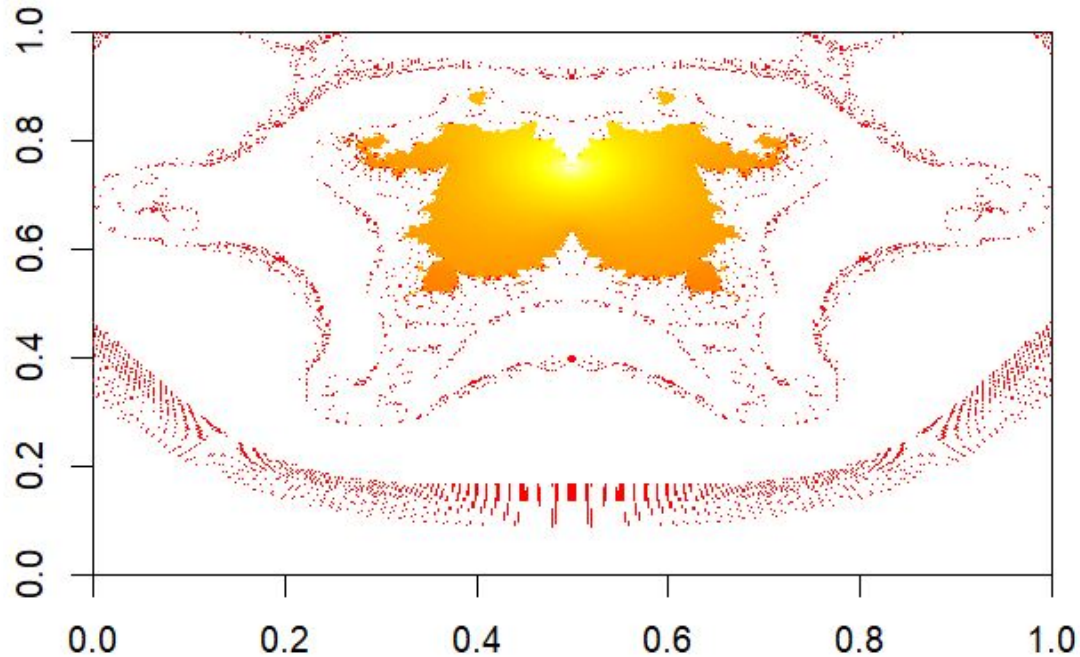
I see the color theme has changed from Red-Yellow, to Black and White

6. Changing to $Z \leftarrow Z^3 + C$



I observe that the fractal pattern has changed.

7. Independent change to $Z \leftarrow Z^7 + Z^6 + Z^5 + Z^4 + Z^3 + Z^2 + Z + C$



I observe that the fractal pattern has changed.