

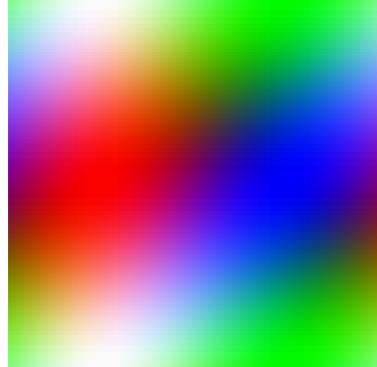
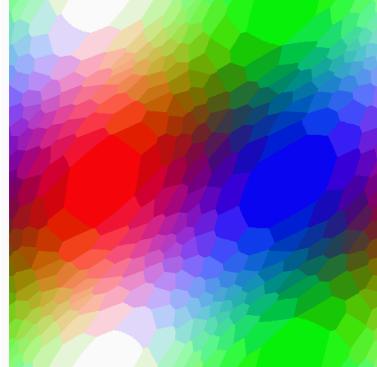
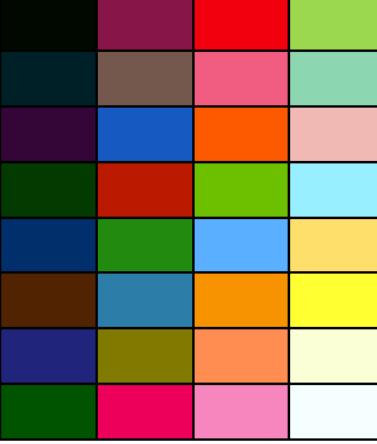
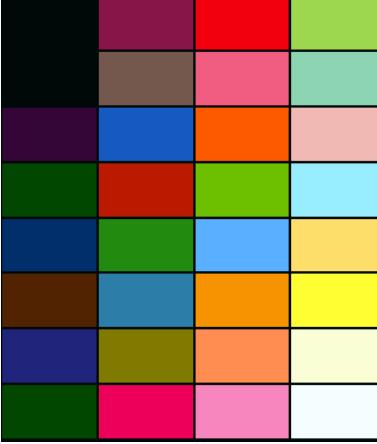
CS 214 Extra Credit 2

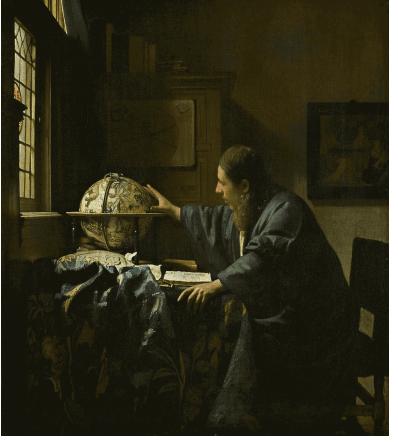
March 28, 2025

Project Members:

John von Neumann (jvn213)
Grace Hopper (gh314)
Alan Turing (at271)

Images Used:

Image Name	Original	C kernel 8-bit colormap
testpattern.png		
32colors.png		

landscape1.png		
astronimas.jpg		
starry-night.png		

Computer Specification:

Processor: Intel(R) Core(TM) i5-8265U CPU @ 1.60GHz

Memory: 32228016 kB

Operating System: Ubuntu 22.04.5 LTS

Language Performance:

Image Name	Width	Height	Pixels	seed	iterations	Python time (sec)	C kernel Time (sec)

testpattern.png	963	964	928332	214	3	40.60	1.053
32colors.png	321	369	928332	214	3	89.94	2.606
landscape1.png	612	461	282132	214	3	12.16	0.371
astronimas.jpg	1200	1353	1623600	214	3	70.95	2.114
starry-night.png	1280	1014	1297920	214	3	59.73	1.551

Average Time Per Pixel (usec):

Python: 64.31

C Kernel: 1.810