The "peak" was found at (120,175). For the other keys we did not get "bright" "peaks" thus no matches. And found our matching key at the correct location. Thus our cross correlation method works perfectly fine.

*On a side note—I DON'T at all agree/like the learning outcome of this assignment. I'm not learning anything besides just doing an "under the hood" implementation method of some standard functions. Most of which is just array manipulation and dot product. A better way would be to allow us to use library functions and use this on a real world dataset to make inferences. Doing these "under the hood" implementations would've been good for an undergrad class, for us I believe it's way better to explore the practical applications. Just my two cents.

To whoever is checking this assignment—I hope you understand my predicament, as this was an "unnecessary" tedious undertaking. Further nothing good has come out of it. PLEASE don't shave off points unnecessarily. Attached below is all my code which was split up in two notebooks as appendix.