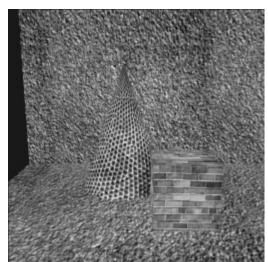
CSE 5524 HW10

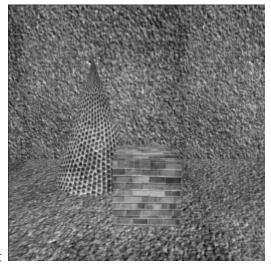
Name: Neng Shi

1)

Input:

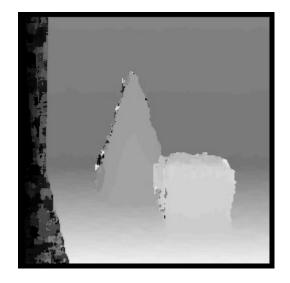


Left



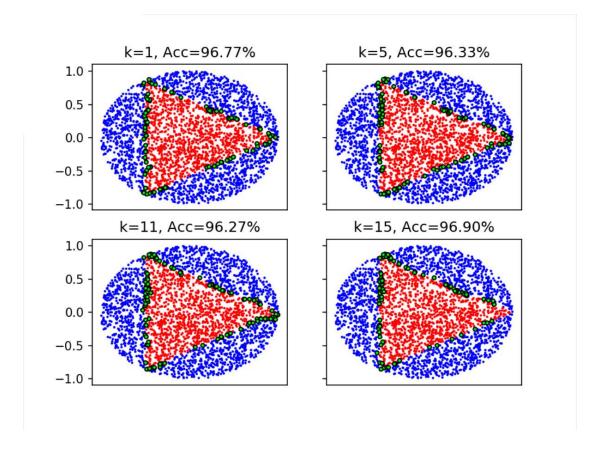
Right

Result:



2)

Result:



Discussion:

First, we can see that most errors we made are at the boundary of classes, which is explainable since these regions are the most contested.

Second, one noticeable phenomenon is that at first, as k increases, we see the accuracy drop slightly, probably because some neighborhoods in the training dataset mislead the classification. However, as we increase k to 15, we see the accuracy increase, indicating that we get enough information from our neighbors to reflect the overall sample distribution.