Part A Report

Ques 1:

What is the total number of computations done by your network?  
 My network performed about 3.35 million computations.

What is the total number of parameters in your network?  
 My network has about 2095690 Parameters.  
  
Ques 2:

The plots are included in a separate file inside of the github repository. For some reason the reports continue to come out blank and the line graphs all lead the accuracy to null although I get an accuracy of 10%. I could not figure out why or how to improve upon this. I tried resizing the images, changing learning rates, changing the activation function, and a number of other things to see if any change could be achieved. Sadly, no success.

Finally I changed the number of filters in my code by doubling them in every layer. This seemed to worsen runtime, but it did not improve the accuracy of my model. The runtime greatly varied when I changed activation functions. There were also values which made the program crash or have an error.

Q3:

* Although I did not see these in my program, increasing the number of filters can improve accuracy.
* Changing the resizing of the image also seems to have an effect.
* More pixels means more details which should mean more accuracy.

Q4:

Even with the best configuration, there was only a 10% accuracy value.

Q5:

<https://github.com/BulletsWrath/Homework-5.git>

The model used was based on pytorch deep learning guide on geeksforgeeks. The rest was done by me and the gemini AI on Google Colab helped me fix errors and improve my code.