- 1) For question 1, the learning rate, lr is changed to 0.005 and the accuracy increases to 92.71%
- 2) For question 2, the dataset is modified where the images are rearranged according to their actual categories. The accuracy achieved is 93.47%.
- 3) For question 3, watermelon and tomato are used for inference on webcam.



Figure 1: Inference for watermelon



Figure 2: Inference for tomato

In Figure 1 and Figure 2, the first percentage is from the model generated from the modified parameter which is the learning rate, the second percentage is from the model generated from the modified dataset.