

## Project Granny Smith



### General guidelines

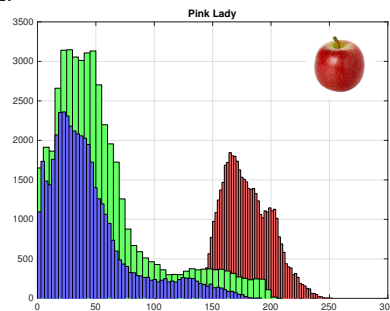
- Form/join a team. Maximum membership is 4.
- Each team picks 4 apple varieties of their own choosing. Online pictures are OK but try to select pictures that are similar in dimensions with enough color contrast.
- Following prior practice, develop color rules for each apple. Your rules should not be overly strict and allow for variations of color and brightness.
- Divide developing color rules among team members.

### Specifics

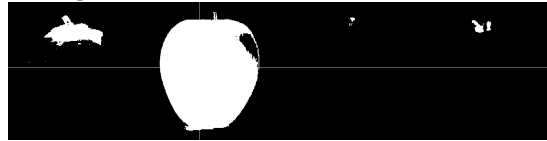
1. (5 points) Your starting line should look something like this. Display.



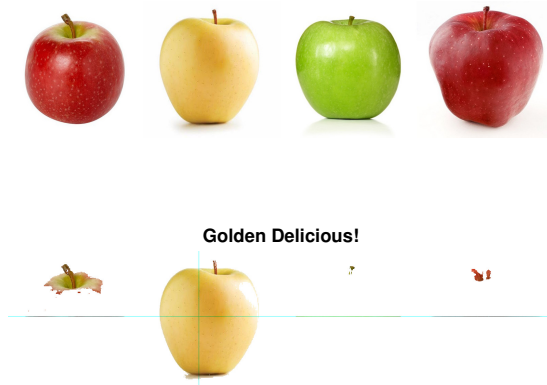
2. (25 points) Develop a rule for the apple variety assigned to you. Indicate the member's name who wrote the rules. Show the color histograms while placing the picture of the apple in the right upper corner as shown.



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3. (25 points) Test the rules. Come up with a visual illustration that the code can pick out the flavor you are testing for. This could take many forms; black and white masks, leaving the apple you want and deleting the rest, etc.



4. (25 points) Ask the team to shuffle the apples and give you the shuffled data. Then pick out your flavor in the new lineup but don't look at the picture yet. Based on your calculations, say if your apple is in the mix and where at. Specify the location from left to right, as in second from left.



5. (20 points) Get a picture of a real apple of the same variety and see if your code still works.