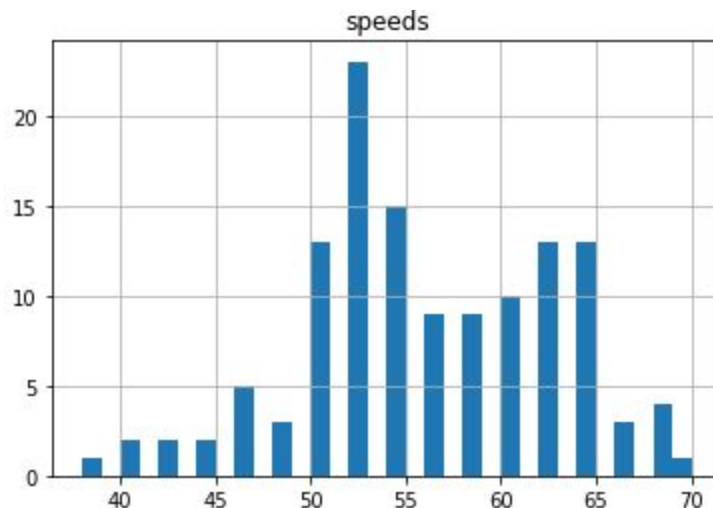


1. I estimate ~2 hours of work

2.

- a. No ethical issues
- b. The paintball is wrong and dangerous: costs money and might cause an accident
- c. 58mph
- d. 13.338
- e. My program would choose a higher threshold if there is a tie. No tie occurs however

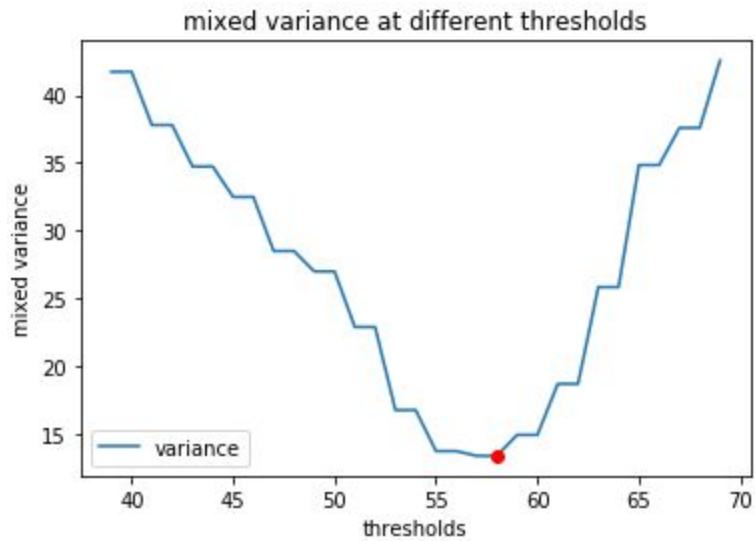


- f. The histogram does show a valley near 58mph, which implies it is where 2 distributions meet

3.

	all elmts	without the last one
mode	7	7
median	14.5	14
midrange	22	22
average	15.775	15.20513
std dev	8.459519	7.753368

- a.
- b. The median and average shifted downward because the removed value was more than the original average/median. The mode remained unchanged because it wasn't 16. The scale of the changes was small for average due to the number of values, but exactly 0.5 for median because a single value was removed, so now there are an odd number of values and it can be a whole number
- c. Otsu's finds an ideal threshold of 22 mph, with mixed variance of 21.818



4.

5.

- a. It took around 2.5 hours to finish this
- b. Most unexpected time on a programming task tends to come from debugging in my experience. Sometimes time is lost to rewriting a part of code to be more streamlined, or correct a misunderstanding in the requirements.