Assignment 1

The government bought and installed the latest facial recognition software at an airport to find terrorists.

The facial recognition software is 85% accurate in finding people on the terrorist watch list and misidentifies 10% of innocent people. In addition, the terrorist watch list captures 50% of people who are not terrorists.

If one in one million people are terrorists, what is the probability that someone who is flagged by the new piece of software is, indeed, a terrorist?

If one in one million people are terrorists, what is the probability that someone who is flagged by the new piece of software is, indeed a terrorist?

How might you improve the accuracy of the result?

If done by hand, bring in assignment to class on Friday, March 8th.

You can also email the result to me at <u>cmangionetran@ucsd.edu</u>