Assignment 3

Read Section 12.5 in AI (Stuart Russell and Peter Norvig)

Read Sections 19.1 to 19.4  
  
and  
  
Watch: YouTube Veritasium (Derek Muller)

<https://www.youtube.com/watch?v=R13BD8qKeTg&t=565s&ab_channel=Veritasium>

and/or  
Watch: YouTube 3blue1brown (Grant Sanderson)

<https://www.youtube.com/watch?v=HZGCoVF3YvM&ab_channel=3Blue1Brown>

and/or

<https://www.youtube.com/watch?v=lG4VkPoG3ko&t=951s&ab_channel=3Blue1Brown>

Bayes’ (Rule|Law|Theorem)

Problem: You go to the doctor in search of a treatment, because you have symptoms. The doctor doesn’t know what you have and gives you a battery of tests. One test comes back positive with an ailment which afflicts 3% of the population. You ask the doctor how likely it is that you have the ailment. The doctor replies that the test is accurate 96% of the time. What is the likelihood (in terms of percentage) that you have the ailment with the positive test result?

Submit your answer, and show your work. PDF is the most preferable format. No need for your “uname -a” “signature” for this assignment.