

CS151 - Written Problem 7
To be done by: Monday, Oct. 8

1. Think about 18.1 and 18.2
2. Draw a decision tree for deciding whether or not to move forward at a road intersection. Use variables such as `FrontOfQueue`, `CarAheadMoving`, `IntersectionBlocked`, `CrossTraffic`, `Pedestrians`, `TurningDirection`, `Cyclist`.
3. 18.25
4. 18.18, but you don't have to actually calculate the values (though feel free to if you want to). *Hint 1:* draw out the tree of possibilities. For example, with $K = 1$ there are just two possibilities, right or wrong. What is the probability of this happening? With $K = 2$ there are now four possibilities (all combinations of the two classifiers getting it right and wrong). *Hint 2:* If you follow this logic, a pattern should start to emerge. The "binomial coefficients" (i.e. "n choose k") may be useful.