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CSE 4309-001  
12/13/2021

Task 2.

- a. 0.72192
- b. 0.12276
- c. The information gain at node E is 0
- d. They end up at Node F and the output is "will wait"
- e. They end up at Node H and the output is "will not wait"

Task 3.

The information gain of each attribute at the root is

A - 0.400

B - 0.151

C - 0.315

A achieves the highest information gain at the root

Task 4.

- a. Highest = 2  
Lowest = 0
- b. Highest = 2  
Lowest = 0

Task 5.

An accuracy of better than 60% can not be guaranteed, but if we created our decision tree forest to maximize information gain we could increase the current accuracy of the binary classifier.