

## Q2b

#####

Max Depth: 1 // Split Criteria: entropy

0.7061224489795919

Max Depth: 1 // Split Criteria: gini

0.7061224489795919

Max Depth: 4 // Split Criteria: entropy

0.7979591836734694

Max Depth: 4 // Split Criteria: gini

0.7979591836734694

Max Depth: 8 // Split Criteria: entropy

0.8122448979591836

Max Depth: 8 // Split Criteria: gini

0.8061224489795918

Max Depth: 12 // Split Criteria: entropy

0.7979591836734694

Max Depth: 12 // Split Criteria: gini

0.8

Max Depth: 16 // Split Criteria: entropy

0.7979591836734694

Max Depth: 16 // Split Criteria: gini

0.8020408163265306

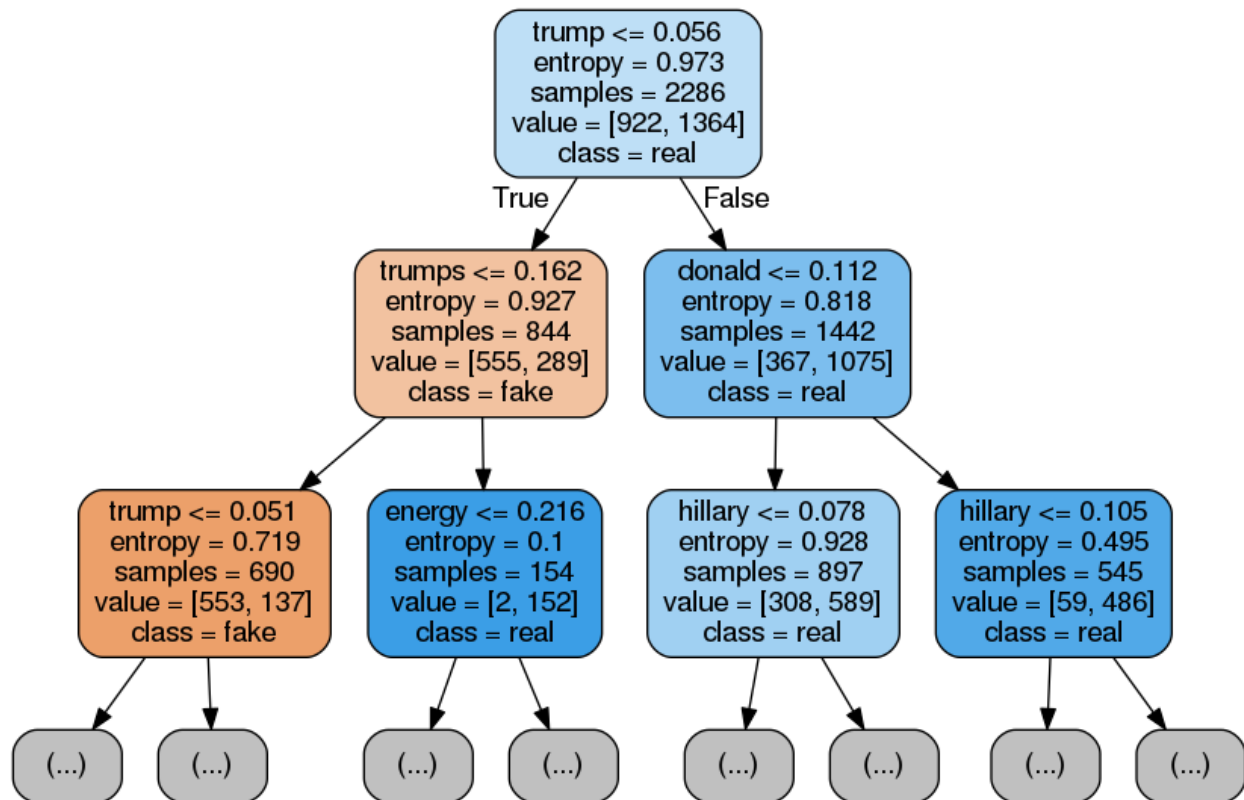
#####

Best Results:

Max Depth: 8 // Split Criteria: entropy

0.8122448979591836

## Q2c



## Q2d

### Top Most Split

xi = trump  
Information Gain: 0.0

### Other Keywords

xi = trumps  
Information Gain: 0.04220966182255703

xi = donald  
Information Gain: 0.061356080101067745

xi = energy  
Information Gain: 0.0006265773118947493

xi = hillary

Information Gain: 0.0346947343091627

xi = canada

Information Gain: 0.00026722978593374247

xi = somemadeupword

Information Gain: 0.0

xi = the

Information Gain: 0.05199581265636355

xi = cat

Information Gain: 0.00021816249648642927