```
C:\Users\16920\anaconda3\python.exe "E:\John Chen\Documents\GitHub\Reddit-Sarcasm-NLP-Analysis\Random Forest.py"
Depth of Tree :  2  Number of Trees  50
Accuracy : 0.5380900000000001
Precision : 0.488078392724063
Recall : 0.6005017175216328
MSE : 0.46190999999999993

Depth of Tree :  5  Number of Trees  50
Accuracy : 0.58395
Precision : 0.38990302621476836
Recall : 0.6458596938057262
MSE : 0.41605

Depth of Tree :  10  Number of Trees  50
Accuracy : 0.62933
Precision : 0.47988154058198323
Recall : 0.6858322638811669
MSE : 0.37067

Depth of Tree :  15  Number of Trees  50
Accuracy : 0.63618
Precision : 0.5087380311799473
Recall : 0.6837975140663164
MSE : 0.36382000000000003

Depth of Tree :  20  Number of Trees  50
Accuracy : 0.64185
Precision : 0.5063654972096006
Recall : 0.6951117360858495
MSE : 0.35815

Depth of Tree :  25  Number of Trees  50
Accuracy : 0.6488700000000001
Precision : 0.5291554566071086
Recall : 0.6959603047654616
MSE : 0.35113000000000005

Depth of Tree :  2  Number of Trees  100
Accuracy : 0.57703
```

```
Precision : 0.42226259182308234
Recall : 0.6567670379869404
MSE : 0.42297

Depth of Tree :  5  Number of Trees  100
Accuracy : 0.61813
Precision : 0.46276700470001
Recall : 0.6757641481224963
MSE : 0.38187

Depth of Tree :  10  Number of Trees  100
Accuracy : 0.63983
Precision : 0.5111359873360227
Recall : 0.6908953231456183
MSE : 0.36017

Depth of Tree :  15  Number of Trees  100
Accuracy : 0.65045
Precision : 0.5266210714965878
Recall : 0.7020108116794651
MSE : 0.34955

Depth of Tree :  20  Number of Trees  100
Accuracy : 0.65593
Precision : 0.5393784779054037
Recall : 0.7041274569042825
MSE : 0.34407

Depth of Tree :  25  Number of Trees  100
Accuracy : 0.66049
Precision : 0.537803019016911
Recall : 0.7131130730394826
MSE : 0.33951

Depth of Tree :  2  Number of Trees  150
Accuracy : 0.5928800000000001
Precision : 0.4029288143238114
Recall : 0.6705602568839737
MSE : 0.40712000000000004

Depth of Tree :  5  Number of Trees  150
```

```
Accuracy : 0.63433
Precision : 0.4811309646307903
Recall : 0.7008647693123977
MSE : 0.36567

Depth of Tree :  10  Number of Trees  150
Accuracy : 0.65014
Precision : 0.516300542173196
Recall : 0.7071049637558983
MSE : 0.34985999999999995

Depth of Tree :  15  Number of Trees  150
Accuracy : 0.6580499999999999
Precision : 0.5300135115252396
Recall : 0.713507636670914
MSE : 0.34195

Depth of Tree :  20  Number of Trees  150
Accuracy : 0.66167
Precision : 0.5382716194135767
Recall : 0.7151066148699117
MSE : 0.33833

Depth of Tree :  25  Number of Trees  150
Accuracy : 0.6649499999999999
Precision : 0.5429171064241585
Recall : 0.7184922229013146
MSE : 0.33505

Depth of Tree :  2  Number of Trees  200
Accuracy : 0.59755
Precision : 0.4757146343301682
Recall : 0.6797984305680627
MSE : 0.40245

Depth of Tree :  5  Number of Trees  200
Accuracy : 0.6365000000000001
Precision : 0.4887627009422775
Recall : 0.7009592963346505
MSE : 0.36350000000000005

```

```
Depth of Tree :  10  Number of Trees  200
Accuracy : 0.65472
Precision : 0.5274093225977363
Recall : 0.7108263696707255
MSE : 0.34528000000000003

Depth of Tree :  15  Number of Trees  200
Accuracy : 0.6609700000000001
Precision : 0.5350335011091606
Recall : 0.7165984305095876
MSE : 0.33903

Depth of Tree :  20  Number of Trees  200
Accuracy : 0.6654200000000001
Precision : 0.5472642798099451
Recall : 0.7171906149317083
MSE : 0.33458

Depth of Tree :  25  Number of Trees  200
Accuracy : 0.6678799999999999
Precision : 0.5462818412478863
Recall : 0.7219617194375312
MSE : 0.33212

------------------
Accuracy :  {50: {2: 0.5380900000000001, 5: 0.58395
    , 10: 0.62933, 15: 0.63618, 20: 0.64185, 25: 0.
    6488700000000001}, 100: {2: 0.57703, 5: 0.61813, 10
    : 0.63983, 15: 0.65045, 20: 0.65593, 25: 0.66049},
    150: {2: 0.5928800000000001, 5: 0.63433, 10: 0.65014
    , 15: 0.6580499999999999, 20: 0.66167, 25: 0.
    6649499999999999}, 200: {2: 0.59755, 5: 0.
    6365000000000001, 10: 0.65472, 15: 0.
    6609700000000001, 20: 0.6654200000000001, 25: 0.
    6678799999999999}}
Precision :  {50: {2: 0.6005017175216328, 5: 0.
    6458596938057262, 10: 0.6858322638811669, 15: 0.
    6837975140663164, 20: 0.6951117360858495, 25: 0.
    6959603047654616}, 100: {2: 0.6567670379869404, 5: 0
    .6757641481224963, 10: 0.6908953231456183, 15: 0.
    7020108116794651, 20: 0.7041274569042825, 25: 0.
```

```
148 7131130730394826}, 150: {2: 0.6705602568839737, 5: 0
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    713507636670914, 20: 0.7151066148699117, 25: 0.
    7184922229013146}, 200: {2: 0.6797984305680627, 5: 0
    .7009592963346505, 10: 0.7108263696707255, 15: 0.
    7165984305095876, 20: 0.7171906149317083, 25: 0.
    7219617194375312}}
149 Recall :  {50: {2: 0.488078392724063, 5: 0.
    38990302621476836, 10: 0.47988154058198323, 15: 0.
    5087380311799473, 20: 0.5063654972096006, 25: 0.
    5291554566071086}, 100: {2: 0.42226259182308234, 5:
    0.46276700470001, 10: 0.5111359873360227, 15: 0.
    5266210714965878, 20: 0.5393784779054037, 25: 0.
    537803019016911}, 150: {2: 0.4029288143238114, 5: 0.
    4811309646307903, 10: 0.516300542173196, 15: 0.
    5300135115252396, 20: 0.5382716194135767, 25: 0.
    5429171064241585}, 200: {2: 0.4757146343301682, 5: 0
    .4887627009422775, 10: 0.5274093225977363, 15: 0.
    5350335011091606, 20: 0.5472642798099451, 25: 0.
    5462818412478863}}
150 MSE :  {50: {2: 0.46190999999999993, 5: 0.41605, 10
    : 0.37067, 15: 0.36382000000000003, 20: 0.35815, 25
    : 0.35113000000000005}, 100: {2: 0.42297, 5: 0.38187
    , 10: 0.36017, 15: 0.34955, 20: 0.34407, 25: 0.33951
    }, 150: {2: 0.40712000000000004, 5: 0.36567, 10: 0.
    34985999999999995, 15: 0.34195, 20: 0.33833, 25: 0.
    33505}, 200: {2: 0.40245, 5: 0.36350000000000005, 10
    : 0.34528000000000003, 15: 0.33903, 20: 0.33458, 25
    : 0.33212}}
151
152 Process finished with exit code 0
153
```