### Testing on the pos.test file which is provided along with pos.data folder

#### Without any Features:

macroF\_Score is 0.604876, macroPrecision is 0.669493 macroRecall is 0.551634

#### Without any Feature and when order is 1:

macroF\_Score is 0.604876, macroPrecision is 0.669493 macroRecall is 0.551634

#### Without any Feature and when order is 2:

Able of create the model but got out of bound exception when testing using the model.

### Without any Feature and when the model is HMM

macroF\_Score is 0.577666, macroPrecision is 0.698057 macroRecall is 0.492694

### First set of feature that were added: (Special Characters, Numericals)

macroF\_Score is 0.604586, macroPrecision is 0.658884 macroRecall is 0.558556

# Second set of feature that were added: ( Special Characters, Numericals + AllCaps, Mixed Caps)

macroF\_Score is 0.615265, macroPrecision is 0.669704 macroRecall is 0.569011

# Third set of feature that were added: (Special Characters, Numericals + AllCaps, Mixed Caps + Mention, HashTag)

macroF\_Score is 0.665307, macroPrecision is 0.714408 macroRecall is 0.622522

## Final set of feature (Special Characters, Numericals + AllCaps, Mixed Caps + Mention, HashTag + urls, Atopwords, Apostrophes)

macroF\_Score is **0.715456**, macroPrecision is **0.747572** macroRecall is **0.685985** 

### Testing on the ner.test file which is provided along with ner.data folder

#### Without any Features:

macroF\_Score is 0.020052, macroPrecision is 0.855556 macroRecall is 0.010145

#### Without any Feature and when order is 1:

macroF\_Score is 0.020052, macroPrecision is 0.855556 macroRecall is 0.010145

#### Without any Feature and when order is 2:

macroF\_Score is 0.000000, macroPrecision is 0.833333 macroRecall is 0.000000

### Without any Feature and when the model is HMM

macroF\_Score is 0.018549, macroPrecision is 0.523810 macroRecall is 0.009442

## First set of feature that were added: (Special Characters, Numericals)

macroF\_Score is 0.020052, macroPrecision is 0.855556 macroRecall is 0.010145

## Second set of feature that were added: (Special Characters, Numericals + AllCaps, Mixed Caps)

macroF\_Score is 0.099497, macroPrecision is 0.582158 macroRecall is 0.054397

## Third set of feature that were added: (Special Characters, Numericals + AllCaps, Mixed Caps + Mention, HashTag)

macroF\_Score is 0.000000, macroPrecision is 1.000000 macroRecall is 0.000000

## Fourth set of feature (Special Characters, Numericals + AllCaps, Mixed Caps + Mention, HashTag + urls, Atopwords, Apostrophes)

macroF\_Score is 0.143542, macroPrecision is 0.585304 macroRecall is 0.081802

## Final set of feature (Special Characters, Numericals + AllCaps, Mixed Caps + Mention, HashTag + urls, Atopwords, Apostrophes + pos)

macroF\_Score is 0.168778, macroPrecision is 0.466936 macroRecall is 0.103005