

N-GRAM REPORT FOR THE ASSIGNMENT

AJAY SINGH (AXS180099)

For $n > 3$ or $n < 2$

N Should Be 2 OR 3

For $b < 0$ or $b > 1$

b Should Be 0 OR 1

For $n = 2$ and $b = 0$ (BIGRAM WITHOUT SMOOTHING)

Probability Matrix for Statement : Milstein is a gifted violinist who creates all sorts of sounds and arrangements .

{'Milstein is': 0.25, 'is a': 0.1364522417153996, 'a gifted': 0.0, 'gifted violinist': 0.0, 'violinist who': 0.3333333333333333, 'who creates': 0.0, 'creates all': 0.0, 'all sorts': 0.00819672131147541, 'sorts of': 1.0, 'of sounds': 0.0, 'sounds and': 0.0, 'and arrangements': 0.0}

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Probabilty of Statement : Milstein is a gifted violinist who creates all sorts of sounds and arrangements

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0.0

Probabilty of Statement : It was a strange and emotional thing to be at the opera on a Friday night .

0.0

For $n = 2$ and $b = 1$ (BIGRAM WITH SMOOTHING)

Probability Matrix for Statement : Milstein is a gifted violinist who creates all sorts of sounds and arrangements .

{'Milstein is': 0.00011588828369451848, 'is a': 0.0001094331363536879, 'a gifted': 0.00010527423939362039, 'gifted violinist': 0.0001159151501101194, 'violinist who': 0.0001159017153453871, 'who creates': 0.00011424654404204273, 'creates all': 0.00011592858798979828, 'all sorts': 0.00011432491139819366, 'sorts of': 0.00011592858798979828, 'of sounds': 0.00010076582023377671, 'sounds and': 0.0001159017153453871, 'and arrangements': 0.00010279605263157894}

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Probabilty of Statement : Milstein is a gifted violinist who creates all sorts of sounds and arrangements .
3.7799420223540856e-48

Probabilty of Statement : It was a strange and emotional thing to be at the opera on a Friday night .
4.5608059827320916e-60

For n=3 and b=0 (TRIGRAM WITHOUT SMOOTHING)

Probability Matrix for Statement : Milstein is a gifted violinist who creates all sorts of sounds and arrangements .

{'Milstein is a': 0.25, 'is a gifted': 0.0, 'a gifted violinist': 0.0, 'gifted violinist who': 0.0, 'violinist who creates': 0.0, 'who creates all': 0.0, 'creates all sorts': 0.0, 'all sorts of': 0.00819672131147541, 'sorts of sounds': 0.0, 'of sounds and': 0.0, 'sounds and arrangements': 0.0}

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0.0

Probabilty of Statement : It was a strange and emotional thing to be at the opera on a Friday night .
0.0

For n=3 and b=1 (TRIGRAM WITH SMOOTHING)

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{'Milstein is a': 0.00011588828369451848, 'is a gifted': 0.0001094331363536879, 'a gifted violinist': 0.00010527423939362039, 'gifted violinist who': 0.0001159151501101194, 'violinist who creates': 0.0001159017153453871, 'who creates all': 0.00011424654404204273, 'creates all sorts': 0.00011592858798979828, 'all sorts of': 0.00011432491139819366, 'sorts of sounds': 0.00011592858798979828, 'of sounds and': 0.00010076582023377671, 'sounds and arrangements': 0.0001159017153453871}

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Probabilty of Statement : Milstein is a gifted violinist who creates all sorts of sounds and arrangements
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3.6771275993460545e-44

Probabilty of Statement : It was a strange and emotional thing to be at the opera on a Friday night .
3.9341512407047024e-56