\<s\> He is a nice guy \<E\>

\<s\> It's nice to get your letter \<E\>

\<s\> I am going to meet you \<E\>

\<s\> I would like a meat sandwich \<E\>

$P(nice | \<s\>) = 0$ $P(to | nice) = 1/2$

$P(meet | to) = 1/2$ $P(meat | to) = 0$

$P(you | meet) = 1$ $P(you | meat) = 0$

$P(\<E\> | you) = 1$

$P(\<s\> \text{ nice to meet you } \<E\>) = 0$

$P(\<s\> \text{ nice to meat you } \<E\>) = 0$

Smoothing (Laplace's law)

$$P(w_i | w_{i-1}) = \frac{0(w_{i-1} \, w_i) + 1}{0(w_{i-1}) + V}$$

$(V = 31)$

$P(\text{nice} | <s>) = 0.029$ $\qquad$ $P(\text{to} | \text{nice}) = 0.061$

$P(\text{meet} | \text{to}) = 0.061$ $\qquad$ $P(\text{meat} | \text{to}) = 0.030$

$P(\text{you} | \text{meet}) = 0.061$ $\qquad$ $P(\text{you} | \text{meat}) = 0.031$

$P(<E> | \text{you}) = 0.063$

$P(<s> \text{ nice to meet you } <E>) = P(\text{nice} | <s>)$

$\qquad \times P(\text{to} | \text{nice}) \times P(\text{meet} | \text{to}) \times (\text{you} | \text{meet})$

$\qquad \times P(<E> | \text{you})$

$= 0.029 \times 0.061 \times 0.061 \times 0.031 \times 0.063$

$= 2.11 \times 10^{-7}$

$P(<s> \text{ nice to meat you } <E>) = P(\text{nice} | <s>)$

$\qquad \times P(\text{to} | \text{nice}) \times P(\text{meat} | \text{to}) \times (\text{you} | \text{meat})$

$\qquad \times P(<E> | \text{you})$

$= 0.029 \times 0.061 \times 0.030 \times 0.031 \times 0.063$

$= 1.04 \times 10^{-7}$

Therefore, $<s>$ nice to meet you $<E>$ is more suitable