## Question 1

$$
\begin{aligned}
g_{1}(x, h, m)= & 1 \text { if } x_{h}=\mathrm{car} \text { and } x_{m}=\text { the } \\
g_{2}(x, h, m)= & 1 \text { if } \operatorname{POS}(h)=\mathrm{NN} \text { and } \operatorname{POS}(m)=\mathrm{DT} \\
& \text { and } \operatorname{POS}(i) \neq \mathrm{VB} \text { for } i \in\{(h+1) \ldots(m-1)\} \\
& \text { and } i \in\{(m+1) \ldots(h-1)\}
\end{aligned}
$$

Question Ra


## Question 2a



## Question 3

- $C($ the $)=1, C(\operatorname{dog})=2$
- $e($ the $\mid 1)=e(\operatorname{dog} \mid 2)=1$
- $q(1 \mid 2)=q(2 \mid 1)=1$

