1)

To study trace:

f(a).

f(b).

g(a).

g(b).

h(b).

k(X):- f(X), g(X), h(X).

X = b.

2)word(determiner,a).

word(determiner,every).

word(noun,criminal).

word(noun,big\_kahuna\_burger).

word(verb,eats).

word(verb,likes).

sentence(Word1,Word2,Word3,Word4,Word5):-

word(determiner,Word1),

word(noun,Word2),

word(verb,Word3),

word(determiner,Word4),

word(noun,Word5).

Query:

sentence(every,criminal,eats,a,big\_kahuna\_burger).

sentence(every,criminal,likes,a,big\_kahuna\_burger).

sentence(a,criminal,eats,a,big\_kahuna\_burger).

sentence(a,criminal,likes,a,big\_kahuna\_burger).