

### Task 3

1. Formal Definition: mad\_cow EquivalentTo cow and (eats some (brain and (part\_of some sheep)))  
Explanation: mad\_cow is a subclass of cow, which is a subclass of vegetarian, which is a subclass of animal
2. It inherits the constraints: eats only (not (animal)) and eats only (not (part\_of some animal))
3. There is a problem because a mad\_cow eats the brain of a sheep and the brain is a part of an animal

### Task 4

1. The class owl:Nothing was added and mad\_cow was moved under it
2. vegetarian was added to its SubClass Of section  
animal and(eats only (not (animal))) and (eats only (not (part\_of some animal))) was added to its SubClass Of (Anonymous Ancestor)
3. Before the reasoner, Minnie had types elderly and female. After the reasoner, Minnie has an additional type 'old lady'.  
Before the reasoner, Tom had type owl:Thing. After the reasoner, Tom has additional types cat and pet
4. Mick is male and drives a white van. The van he drives is Q123 ABC. He is also a dog owner. His pet dog is Rex and he likes Rex. He also reads the Daily Mirror
5. animal lover, cat owner, dog, owner, old lady
6. Yes
7. Yes