

# Foundations of Artificial Intelligence and Knowledge Representation

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## Module 1: KR exercise

Consider the following specification:

Busses are vehicles that have 4 wheels and possibly more, and are powered by an engine.

Cars are vehicles that have exactly 4 wheels and are powered by an engine.

Bicycles are vehicles that have exactly 2 wheels and are powered by a human.

An eByke is a bicycle powered by a human and by an engine.

Drivers of Cars are adults with a drive license of type B.

Drivers of Bus are adults with a drive license of type C.

A drive license of type C is also of type B.

Drivers of bicycles are persons.

There are different types of drivers.

- 1) Chose a knowledge representation language for representing this knowledge.
- 2) Write a KB that represents the above knowledge, defining in a clear way the meaning of all the symbols used.
- 3) Add to this knowledge base some individuals and some vehicles.
- 4) A driver is better than another if he/she can drive more Vehicles. Write a query that allow to check if one driver is better than another.