Assignment 2 - AAI

1) Open the Folder Prolog:
Invoke the 2-Prolog-Interpreter and test the family example in the following way:

a) Not only the predicate married, but also the predicates using married may lead to an infinite loop if they are queried with certain parameters.
Test these predicates and query them with parameters leading to an infinite loop and with parameters giving an answer in finite time.

b) Fix up the knowledge base such that an infinite loop can never occur.

2) a) Specify at least one advantage and one disadvantage for the use of a general logical problem solver in a knowledge-based system.

b) What kind of logical formulae may be used in Prolog?
Give an example for a formula involving 4 variables that can be used in a Prolog knowledge base and one that cannot. Use mathematical notation for both formulae and also the Prolog notation for the first formula.

c) How come that no logical programming language admits all types of formulae?

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3) For students interested in more advanced Prolog solutions:

   Consider the three solutions of Bratko in the Prolog folder for the 8-queens-problem (2 of them were shown in class) and compare their runtime.

   Can you explain the differences?

4) For experienced programmers:

   Test the tourist information system:
   http://vsrv-studprojekt2.fh-wedel.de:8080/touristinformationsystem2/home

   Find the bugs and the interfaces not working and apply for a software project where you fix this. Join in teams for accomplishing this task.

5) For students willing to test their programming skills:

   Participate in the programing contest:

   Shootout: Friday, October 21, 12.30 hrs, HS 5