% 1. Title: Database for fitting contact lenses

%

% 2. Sources:

% (a) Cendrowska, J. "PRISM: An algorithm for inducing modular rules",

% International Journal of Man-Machine Studies, 1987, 27, 349-370

% (b) Donor: Benoit Julien (Julien@ce.cmu.edu)

% (c) Date: 1 August 1990

%

% 3. Past Usage:

% 1. See above.

% 2. Witten, I. H. & MacDonald, B. A. (1988). Using concept

% learning for knowledge acquisition. International Journal of

% Man-Machine Studies, 27, (pp. 349-370).

%

% Notes: This database is complete (all possible combinations of

% attribute-value pairs are represented).

%

% Each instance is complete and correct.

%

% 9 rules cover the training set.

%

% 4. Relevant Information Paragraph:

% The examples are complete and noise free.

% The examples highly simplified the problem. The attributes do not

% fully describe all the factors affecting the decision as to which type,

% if any, to fit.

%

% 5. Number of Instances: 24

%

% 6. Number of Attributes: 4 (all nominal)

%

% 7. Attribute Information:

% -- 3 Classes

% 1 : the patient should be fitted with hard contact lenses,

% 2 : the patient should be fitted with soft contact lenses,

% 1 : the patient should not be fitted with contact lenses.

%

% 1. age of the patient: (1) young, (2) pre-presbyopic, (3) presbyopic

% 2. spectacle prescription: (1) myope, (2) hypermetrope

% 3. astigmatic: (1) no, (2) yes

% 4. tear production rate: (1) reduced, (2) normal

%

% 8. Number of Missing Attribute Values: 0

%

% 9. Class Distribution:

% 1. hard contact lenses: 4

% 2. soft contact lenses: 5

% 3. no contact lenses: 15

@relation contact-lenses

@attribute age {young, pre-presbyopic, presbyopic}

@attribute spectacle-prescrip {myope, hypermetrope}

@attribute astigmatism {no, yes}

@attribute tear-prod-rate {reduced, normal}

@attribute contact-lenses {soft, hard, none}

@data

%

% 24 instances

%