

CS4600 - Introduction to Intelligent Systems

Homework 1 - Decision Trees

Assume that you have the following training examples available:

	F1	F2	F3	F4	F5	Class
Example 1	t	t	f	f	f	t
Example 2	f	f	t	t	f	t
Example 3	t	f	f	t	f	t
Example 4	t	f	t	f	t	t
Example 5	f	t	f	f	f	f
Example 6	t	t	f	t	t	f
Example 7	f	t	t	t	t	f

Use all of the training examples to construct a decision tree. In case of ties between features, break ties in favor of features with smaller numbers (for example, favor F1 over F2, F2 over F3, and so on).

How does the resulting decision tree classify the following example:

	F1	F2	F3	F4	F5	Class
Example 8	f	f	f	t	t	?