

## EXERCISE DECISION TREES

Using the data set GOLF given below, obtain a decision tree through the manual execution of the algorithm “the most discriminating attribute”; in the case of continuous attributes, make the binary partition based on the median of the set of values that such an attribute takes.

**classes:**  $C = \{play, not\_play\}$

**attributes and values:**

condition: sunny, cloudy, rainy

temperature: continuous value

humidity: continuous value

wind: yes, no

condition	temperature	humidity	wind	class
sunny	85	85	no	not_play
sunny	80	90	yes	not_play
cloudy	83	78	no	play
rainy	70	96	no	play
rainy	68	80	no	play
rainy	65	70	yes	not_play
cloudy	64	65	yes	play
sunny	72	95	no	not_play
sunny	69	70	no	play
rainy	75	80	no	play
sunny	75	70	yes	play
cloudy	72	90	yes	play
cloudy	81	75	no	play
rainy	71	80	yes	not_play