HOCHSCHULE LANDSHUT

Artificial Intelligence I

Lab 6 - Winter Semester 2023 / 2024
https://moodle.haw-landshut.de/course/view.php?id=10282

1. Given the datasets

- S_1 = (yes, yes, yes, no, no, yes, yes, yes, yes, no, no)
- S_2 = (yes, yes, yes, no, no, no)

compute the corresponding entropy values. Which one has the greater entropy and thus more uncertainty?

2. Given the following data set for the skiing classification problem

Day	*Snow_Dist*	*Weekend*	*Sun*	*Skiing*
1	≤ 100	yes	yes	yes
2	≤ 100	yes	yes	yes
3	≤ 100	yes	no	yes
4	≤ 100	no	yes	yes
5	> 100	yes	yes	yes
6	> 100	yes	yes	yes
7	> 100	yes	yes	no
8	> 100	yes	no	no
9	> 100	no	yes	no
10	> 100	no	yes	no
11	> 100	no	no	no

generate the corresponding decision tree using the ID3-algorithm.