The following table is courtesy of aitude.com.

We have been given below a table of a dataset having 14 examples. Here the column **Play Tennis** is the target variable(label). And other columns such as **Outlook**, **Temperature**, **Humidity** and **Wind** are the features. We want to know when it is the best Day to play tennis. For this, we want to construct a decision tree for the given training dataset.

With your team, build a decision tree from the table.

Source:

<https://www.aitude.com/decision-tree-in-machine-learning-with-example/>

Result:

Diagram

Description automatically generated

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Day** | **Outlook** | **Temperature** | **Humidity** | **Wind** | **Play Tennis** |
| 1 | Sunny | Hot | High | Weak | No |
| 2 | Sunny | Hot | High | Strong | No |
| 3 | Overcast | Hot | High | Weak | Yes |
| 4 | Rain | Mild | High | Weak | Yes |
| 5 | Rain | Cool | Normal | Weak | Yes |
| 6 | Rain | Cool | Normal | Strong | No |
| 7 | Overcast | Cool | Normal | Strong | Yes |
| 8 | Sunny | Mild | High | Weak | No |
| 9 | Sunny | Cool | Normal | Weak | Yes |
| 10 | Rain | Mild | Normal | Weak | Yes |
| 11 | Sunny | Mild | Normal | Strong | Yes |
| 12 | Overcast | Mild | High | Strong | Yes |
| 13 | Overcast | Hot | Normal | Weak | Yes |
| 14 | Rain | Mild | High | Strong | No |

Team Responses (type “DONE” when finished)

Team 1

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(your response goes here)

Team 2

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(your response goes here)

Team 3

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(your response goes here)

Team 4

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(your response goes here)

Team 1

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(your response goes here)