

In [3]:

```
import Chefboost as chef
import pandas as pd
```

In [4]:

```
df = pd.read_csv("dataset/golf2.txt")
```

In [6]:

```
print(df)
```

	Outlook	Temp.	Humidity	Wind	Decision
0	Sunny	85	85	Weak	No
1	Sunny	80	90	Strong	No
2	Overcast	83	78	Weak	Yes
3	Rain	70	96	Weak	Yes
4	Rain	68	80	Weak	Yes
5	Rain	65	70	Strong	No
6	Overcast	64	65	Strong	Yes
7	Sunny	72	95	Weak	No
8	Sunny	69	70	Weak	Yes
9	Rain	75	80	Weak	Yes
10	Sunny	75	70	Strong	Yes
11	Overcast	72	90	Strong	Yes
12	Overcast	81	75	Weak	Yes
13	Rain	71	80	Strong	No

In [7]:

```
config = {'algorithm': 'C4.5'}
```

In [12]:

```
model = chef.fit(df, config)
```

C4.5 tree is going to be built...
Accuracy: 85.71428571428571 % on 14 instances
finished in 0.21587538719177246 seconds

In [9]:

```
df.iloc[0]
```

Out[9]:

```
Outlook      Sunny
Temp.         >83
Humidity      >65
Wind          Weak
Decision      No
Name: 0, dtype: object
```

In [13]:

```
model = chef.fit(df.copy(), config)
```

C4.5 tree is going to be built...
Accuracy: 85.71428571428571 % on 14 instances
finished in 0.292832612991333 seconds

In [14]:

```
prediction = chef.predict(model, df.iloc[0])
```

In [16]:

```
print(prediction)
```

No

In [18]:

```
for index, instance in df.iterrows():
    prediction = chef.predict(model, instance)
    actual = instance['Decision']

    if actual == prediction:
        classified = True
    else:
        classified = False
        print("*", end='')

    print(actual, " - ", prediction)
```

```
No - No
*No - Yes
Yes - Yes
Yes - Yes
Yes - Yes
No - No
Yes - Yes
*No - Yes
Yes - Yes
Yes - Yes
Yes - Yes
Yes - Yes
Yes - Yes
Yes - Yes
No - No
```

In []: