




```
import pandas as pd
from sklearn.preprocessing import LabelEncoder
```

```
path="/content/playtennis.csv"
```

```
df=pd.read_csv("/content/playtennis.csv")
```

df

| | Day | Outlook | Temperature | Humidity | Wind | PlayTennis | |
|----|-----|----------|-------------|----------|--------|------------|---|
| 0 | D1 | Sunny | Hot | High | Weak | No |  |
| 1 | D2 | Sunny | Hot | High | Strong | No |  |
| 2 | D3 | Overcast | Hot | High | Weak | Yes |  |
| 3 | D4 | Rain | Mild | High | Weak | Yes | |
| 4 | D5 | Rain | Cool | Normal | Weak | Yes | |
| 5 | D6 | Rain | Cool | Normal | Strong | No | |
| 6 | D7 | Overcast | Cool | Normal | Strong | Yes | |
| 7 | D8 | Sunny | Mild | High | Weak | No | |
| 8 | D9 | Sunny | Cool | Normal | Weak | Yes | |
| 9 | D10 | Rain | Mild | Normal | Weak | Yes | |
| 10 | D11 | Sunny | Mild | Normal | Strong | Yes | |
| 11 | D12 | Overcast | Mild | High | Strong | Yes | |
| 12 | D13 | Overcast | Hot | Normal | Weak | Yes | |
| 13 | D14 | Rain | Mild | High | Strong | No | |

```
categorical_cols = df.select_dtypes(include=['object']).columns
```

```
le = LabelEncoder()
```

```
for col in categorical_cols:
    df[col] = le.fit_transform(df[col])
```

```
print(df)
```

| | Day | Outlook | Temperature | Humidity | Wind | PlayTennis |
|----|-----|---------|-------------|----------|------|------------|
| 0 | 0 | 2 | 1 | 0 | 1 | 0 |
| 1 | 6 | 2 | 1 | 0 | 0 | 0 |
| 2 | 7 | 0 | 1 | 0 | 1 | 1 |
| 3 | 8 | 1 | 2 | 0 | 1 | 1 |
| 4 | 9 | 1 | 0 | 1 | 1 | 1 |
| 5 | 10 | 1 | 0 | 1 | 0 | 0 |
| 6 | 11 | 0 | 0 | 1 | 0 | 1 |
| 7 | 12 | 2 | 2 | 0 | 1 | 0 |
| 8 | 13 | 2 | 0 | 1 | 1 | 1 |
| 9 | 1 | 1 | 2 | 1 | 1 | 1 |
| 10 | 2 | 2 | 2 | 1 | 0 | 1 |
| 11 | 3 | 0 | 2 | 0 | 0 | 1 |
| 12 | 4 | 0 | 1 | 1 | 1 | 1 |
| 13 | 5 | 1 | 2 | 0 | 0 | 0 |

