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In [ ]: import pandas as pd
import numpy as np
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```
In [ ]: file="C:\\Users\\asus\\OneDrive\\Desktop\\college_sem\\5th sem\\ml_lab\\ml2\\P2datas
```

```
In [ ]: data=pd.read_csv(file)
data
```

```
Out[ ]:
```

	Sky	AirTemp	Humidity	Wind	Water	Forecast	EnjoySport
0	Sunny	Warm	Normal	Strong	Warm	Same	Yes
1	Sunny	Warm	High	Strong	Warm	Same	Yes
2	Rainy	Cold	High	Strong	Warm	Change	No
3	Sunny	Warm	High	Strong	Cool	Change	Yes

```
In [ ]: concepts = np.array(data)[:,-1]
concepts
```

```
Out[ ]: array(['Sunny', 'Warm', 'Normal', 'Strong', 'Warm', 'Same'],
      ['Sunny', 'Warm', 'High', 'Strong', 'Warm', 'Same'],
      ['Rainy', 'Cold', 'High', 'Strong', 'Warm', 'Change'],
      ['Sunny', 'Warm', 'High', 'Strong', 'Cool', 'Change']],
      dtype=object)
```

```
In [ ]: target = np.array(data[:,-1])
target
```

```
Out[ ]: array(['Yes', 'Yes', 'No', 'Yes'], dtype=object)
```

```
In [ ]: def train(con,tar):
    for i, val in enumerate(tar):
        if val=='Yes':
            specific_h=con[i].copy()
            break
    for i, val in enumerate(con):
        if tar[i]=='Yes':
            for x in range(len(specific_h)):
                if val[x]!=specific_h[x]:
                    specific_h[x]='?'
            else:
                pass
    return specific_h
```

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In [ ]: print(train(concepts,target))
```

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['Sunny' 'Warm' '?' 'Strong' '?' '?']
```

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In [ ]:
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