Practical 1

Write a program to demonstrate FIND-S algorithm for finding the most specific hypothesis based on a given set of training data samples. Read the training data from a .CSV file.

Program:-

```
import pandas as pd
df = pd.read_csv("dataset.csv")
data = df.drop('Goes',axis='columns')
target = df.Goes

def train(concept,target):
    for i, val in enumerate(target):
        if val == "Yes":
            specific_hypothesis = concept[i].copy()
            break

    for i, val in enumerate(concept):
        if target[i] == "Yes":
            for x in range(len(specific_hypothesis)):
                if val[x] != specific_hypothesis[x]:
                    specific_hypothesis[x] = '?'
                else:
                    pass

    return specific_hypothesis

print("\n The final hypothesis is:",train(data,target))
```

OUTPUT

```
The final hypothesis is: ['?' 'Sunny' '?' 'Yes' '?' '?']
```