

```

1 import csv
2
3 hypo = ['%'] * 6
4
5 data=[]
6 print("\nThe given training examples are:")
7
8 with open('dataset_p1.csv') as csv_file:
9     readcsv = csv.reader(csv_file, delimiter=',')
10    next(readcsv)
11    for row in readcsv:
12        print(row)
13        if(row[-1]=="Yes"):
14            data.append(row)
15
16 print("\nThe positive examples are:")
17 for x in data:
18     print(x)
19
20 print("\nThe steps of the Find-s algorithm are\n",hypo)
21
22 for i in range(len(data)):
23     for j in range(len(data[i])-1):
24         if hypo[j] == '%':
25             hypo[j] = data[i][j]
26         elif hypo[j] != data[i][j]:
27             hypo[j] = '?'
28     print(hypo)
29
30 print("\nThe maximally specific Find-s hypothesis for the given training examples is:")
31 print([h for h in hypo if h != '%'])

```



The given training examples are:

```

['Sunny', 'Warm', 'Normal', 'Strong', 'Warm', 'Same', 'Yes']
['Sunny', 'Warm', 'High', 'Strong', 'Warm', 'Same', 'Yes']
['Rainy', 'Cold', 'High', 'Strong', 'Warm', 'Change', 'No']
['Sunny', 'Warm', 'High', 'Strong', 'Cool', 'Change', 'Yes']

```

The positive examples are:

```

['Sunny', 'Warm', 'Normal', 'Strong', 'Warm', 'Same', 'Yes']
['Sunny', 'Warm', 'High', 'Strong', 'Warm', 'Same', 'Yes']
['Sunny', 'Warm', 'High', 'Strong', 'Cool', 'Change', 'Yes']

```

The steps of the Find-s algorithm are

```

['%', '%', '%', '%', '%', '%']
['Sunny', 'Warm', 'Normal', 'Strong', 'Warm', 'Same']
['Sunny', 'Warm', '?', 'Strong', 'Warm', 'Same']
['Sunny', 'Warm', '?', 'Strong', '?', '?']

```

The maximally specific Find-s hypothesis for the given training examples is:

```

['Sunny', 'Warm', '?', 'Strong', '?', '?']

```