

In [21]:

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import csv
a=[]
with open("ushap1.csv","r") as csvfile:
    fdata=csv.reader(csvfile)
    for row in fdata:
        a.append(row)
        print(row)
num_att=len(a[0])-1
S=['0']*num_att
G=['?']*num_att
print(S)
print(G)
temp=[]
for i in range(0,num_att):
    S[i]=a[0][i]
print("-----")
for i in range(0,len(a)):
    if a[i][num_att]=="YES":
        for j in range(0,num_att):
            if S[j]!=a[i][j]:
                S[j]='?'
        for j in range(0,num_att):
            for k in range(0,len(temp)):
                if temp[k][j]!=S[j] and temp[k][j]!='?':
                    del temp[k]
    if a[i][num_att]=="NO":
        for j in range(0,num_att):
            if a[i][j]!=S[j] and S[j]!='?':
                G[j]=S[j]
                temp.append(G)
                G=['?']*num_att
print(S)
if len(temp)==0:
    print(G)
else:
    print(temp)
print("-----")

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['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']
['0', '0', '0', '0', '0', '0']
['?', '?', '?', '?', '?', '?']

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['sunny', 'warm', 'normal', 'strong', 'warm', 'same']
['?', '?', '?', '?', '?', '?']

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['sunny', 'warm', 'normal', 'strong', 'warm', 'same']
['?', '?', '?', '?', '?', '?']

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['sunny', 'warm', 'normal', 'strong', 'warm', 'same']
['?', '?', '?', '?', '?', '?']

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['sunny', 'warm', 'normal', 'strong', 'warm', 'same']
['?', '?', '?', '?', '?', '?']

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