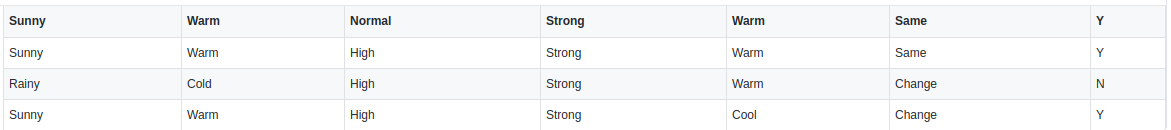
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Question:-**Implement candidate elimination algorithm on given data set.**

**Input:-**



**Code:-**

import numpy as np

import pandas as pd

import os

data=pd.read\_csv("../input/candielimination/CandidateElimination.csv")

concepts = np.array(data.iloc[:,0:-1])

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

def learn(concepts, target):

specific\_h = concepts[0].copy()

print("Initialization of specific\_h and general\_h")

print("specific\_h: ",specific\_h)

general\_h = [["?" for i in range(len(specific\_h))] for i in range(len(specific\_h))]

print("general\_h: ",general\_h)

print("concepts: ",concepts)

for i, h in enumerate(concepts):

if target[i] == "Y":

for x in range(len(specific\_h)):

#print("h[x]",h[x])

if h[x] != specific\_h[x]:

specific\_h[x] = '?'

general\_h[x][x] = '?'

if target[i] == "N":

for x in range(len(specific\_h)):

if h[x] != specific\_h[x]:

general\_h[x][x] = specific\_h[x]

else:

general\_h[x][x] = '?'

print("\nSteps of Candidate Elimination Algorithm: ",i+1)

print("Specific\_h: ",i+1)

print(specific\_h,"\n")

print("general\_h :", i+1)

print(general\_h)

indices = [i for i, val in enumerate(general\_h) if val == ['?', '?', '?', '?', '?', '?']]

print("\nIndices",indices)

for i in indices:

general\_h.remove(['?', '?', '?', '?', '?', '?'])

return specific\_h, general\_h

s\_final,g\_final = learn(concepts, target)

print("\nFinal Specific\_h:", s\_final, sep="\n")

print("Final General\_h:", g\_final, sep="\n")

**Output:-**

