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|  | **EXP.NO: 9**  **DATE:19-07-2023** |
| **Aim:** Implementing FIND-S algorithm using python  **Algorithm :**  1. Initialize h to the most specific hypothesis in H  2. For each positive training instance x  For each attribute constraint a, in h  If the constraint a, is satisfied by x  Then do nothing  Else replace a, in h by the next more general constraint that is satisfied by x 3. Output hypothesis h  **Program (FindS.py)**  import csv  a = []  # Read data from 'enjoysport.csv' and store it in list 'a'  with open('enjoysport.csv', 'r') as csvfile:  for row in csv.reader(csvfile):  a.append(row)  print(a)  print("\n The total number of training instances are : ", len(a))  num\_attribute = len(a[0]) - 1  print("\n The initial hypothesis is :")  hypothesis = ['0'] \* num\_attribute  print(hypothesis)  # Training the hypothesis  for i in range(0, len(a)):  if a[i][num\_attribute] == 'Yes': # for each positive example only (assuming 'Yes' indicates positive)  for j in range(0, num\_attribute):  if hypothesis[j] == '0' or hypothesis[j] == a[i][j]:  hypothesis[j] = a[i][j]  else:  hypothesis[j] = '?'  print("\n The hypothesis for the training instance {} is:".format(i + 1), hypothesis)  print("\n The Maximally specific hypothesis for the training instance is:")  print(hypothesis)    **Training Database :**    **OUTPUT:** | |