

Implement and demonstrate the FIND-S algorithm for finding the most specific hypothesis based on a given set of training data samples.



```
idle shell 3.13.5
File Edit Shell Debug Options Window Help
Python 3.13.5 (tags/v3.13.5:6cb20a2, Jun 11 2025, 16:15:46) [MSC v.1943 64 bit (AMD64)] on win32
Enter "help" below or click "Help" above for more information.
>>> ===== RESTART: C:\Users\kalpa\Downloads\1.find_s (1).py =====
[['sky', 'airtemp', 'humidity', 'wind', 'water', 'forecast', 'enjoysport'], ['sunny', 'warm', 'normal', 'strong', 'warm', 'same', 'yes'], ['sunny', 'warm', 'high', 'strong', 'warm', 'change', 'no'], ['sunny', 'warm', 'high', 'strong', 'cool', 'change', 'yes']]
The total number of training instances are : 5
The initial hypothesis is :
[0, 0, 0, 0, 0]
The hypothesis for the training instance 1 is :
[0, 0, 0, 0, 0]
The hypothesis for the training instance 2 is :
['sunny', 'warm', 'normal', 'strong', 'warm', 'same']
The hypothesis for the training instance 3 is :
['sunny', 'warm', '?', 'strong', 'warm', 'same']
The hypothesis for the training instance 4 is :
['sunny', 'warm', '?', 'strong', 'warm', 'same']
The hypothesis for the training instance 5 is :
['sunny', 'warm', '?', 'strong', '?', '?']
The Maximally specific hypothesis for the training instance is
['sunny', 'warm', '?', 'strong', '?', '?']
```