27-09-2021 MACHINE LEARNING LAB

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LAB - 04

1) FIND S ALGORITHM :

Aim :

To implement the find s algorithm and find the most specific hypothesis that fits all the positive example of a given data set.

Algorithm :

Let h be the final hypothesis.

i) Upload the data set.

ii) Initialise h with the first positive example.

iii) Now consider all the positive examples, if you come across a negative example, then skip and more to the next positive example.

iv) Now check if each attribute in the example is equal to hypothesis value

v) If the value matches, no changes are made.

vi) If the value does not match, change it to '?'

vii) Repeat steps 3-6 until the last positive example in the data set is reached.

2) CANDIDATE ELIMINATION ALGORITHM :

Aim :

To implement the candidate elimination algorithm and find the general and specific hypothesis that fits all the examples of a given data set.

Algorithm :

Let a be general hypothesis and s be specific hypothesis.

i) Load the data set.

ii) Initialise G and S.

iii) For each training example check if it is negative or positive.

iv) If it is positive example, then check if attribute value is equal to hypothesis value

v) If it is not equal, replace attribute value with '?'

vi) If it is a negative example make G more specific.