TAHA ENAYAT 2070865 Machine Learning

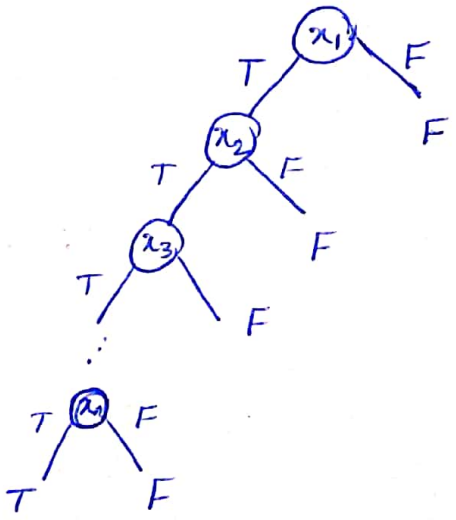
Lecture 5

* AND $x_1 \wedge x_2 \wedge \dots \wedge x_n$

if one variable if false, the whole term would be false.

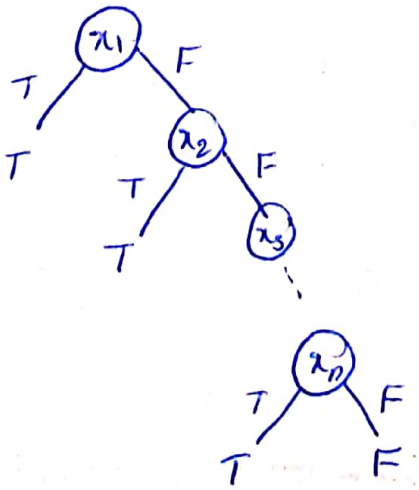
only if all variables are true, the term is true.

The decision tree would be like this :



* OR $x_1 \vee x_2 \vee \dots \vee x_n$

in this case, if one variable is true, all is true. Here we see the decision tree:



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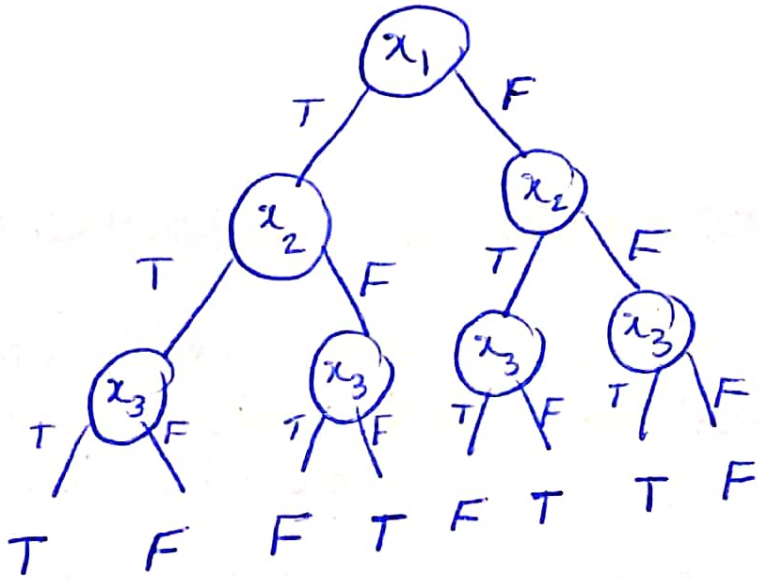
* XOR x_1 XOR x_2 XOR ... XOR x_n

in this case if the number of variables with T value is even, the result is False, but if True variables are odd, the result is True. Here we see the corresponding desicion tree:



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