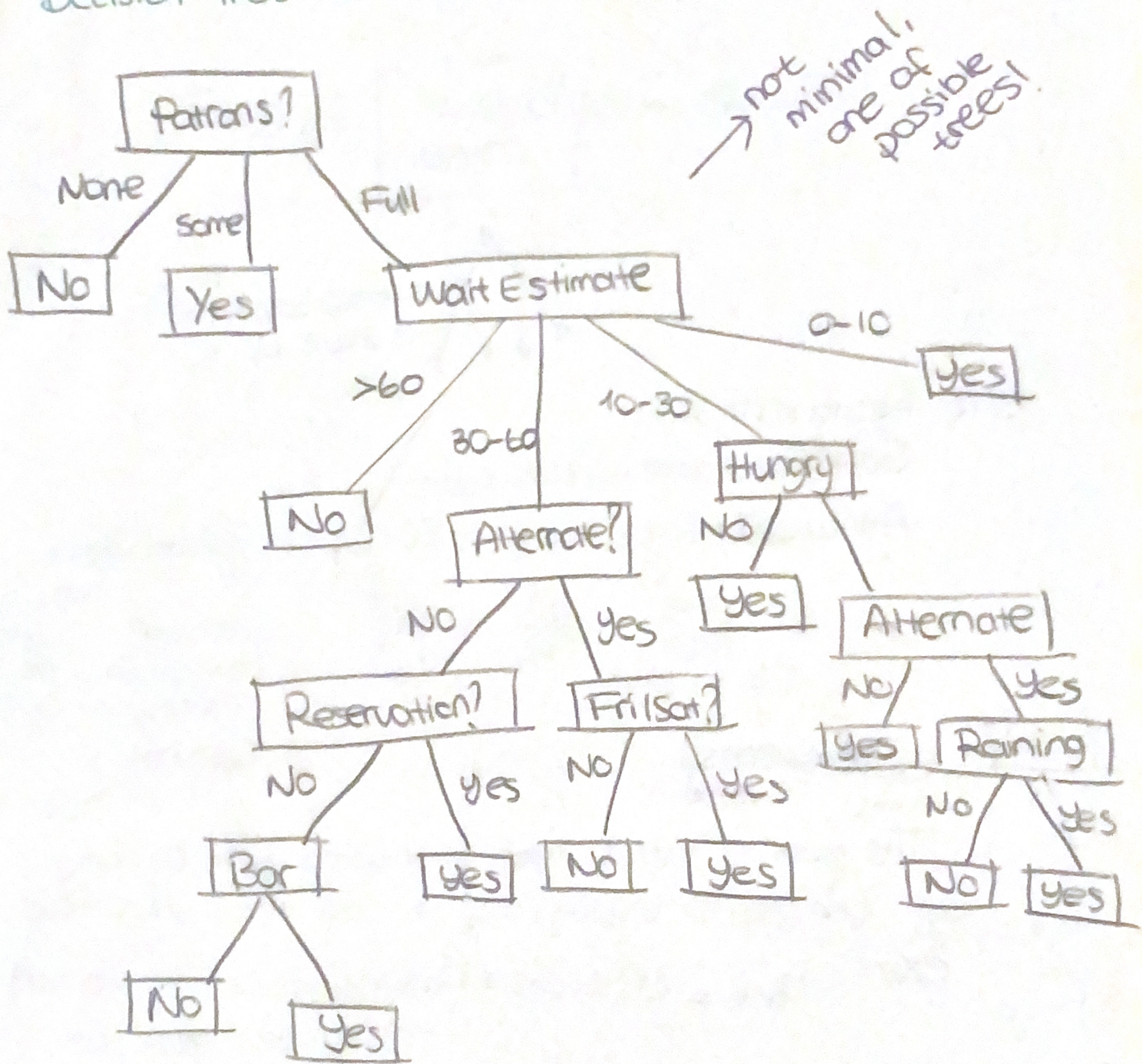
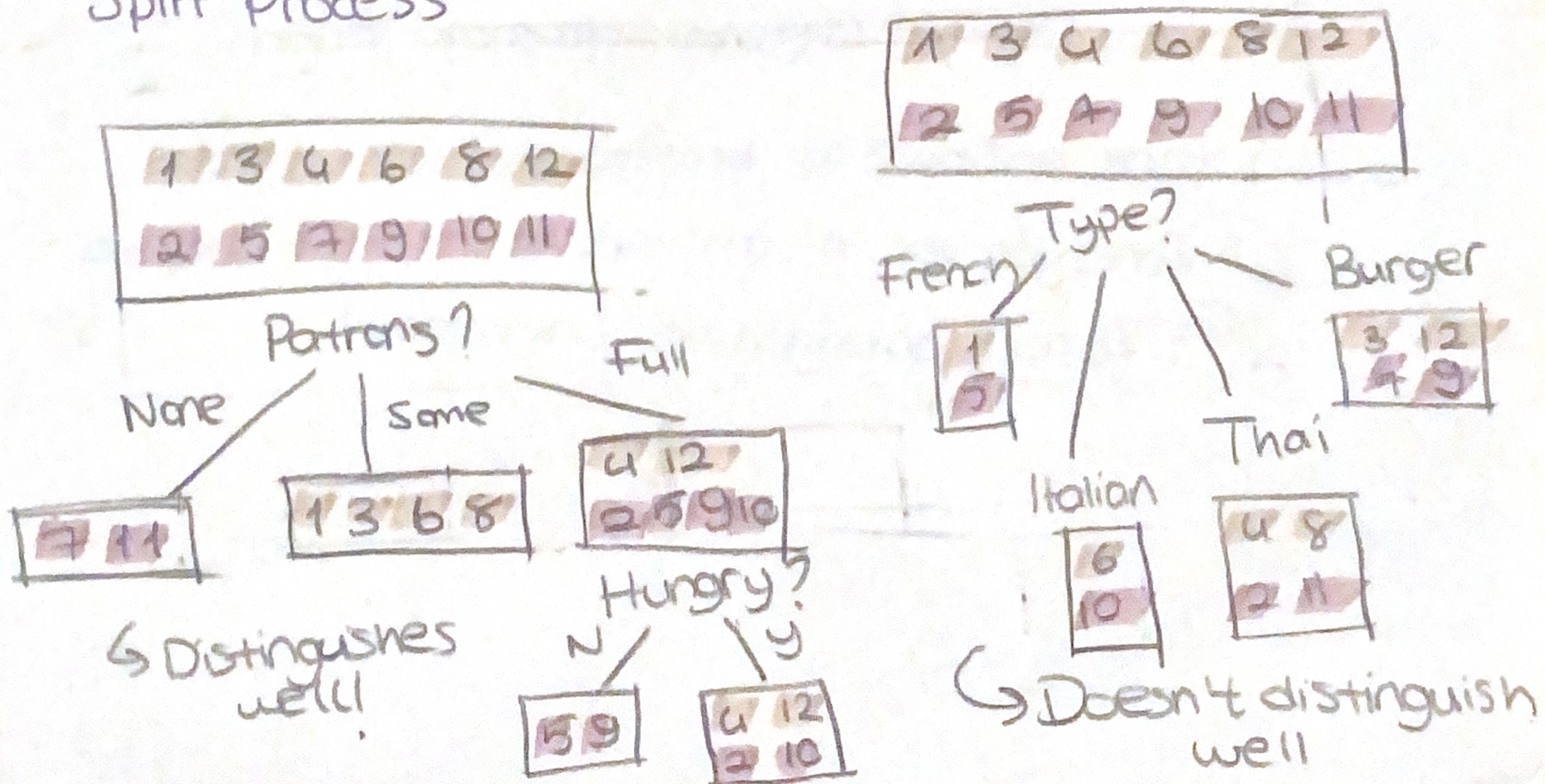


# Decision Tree From Examples

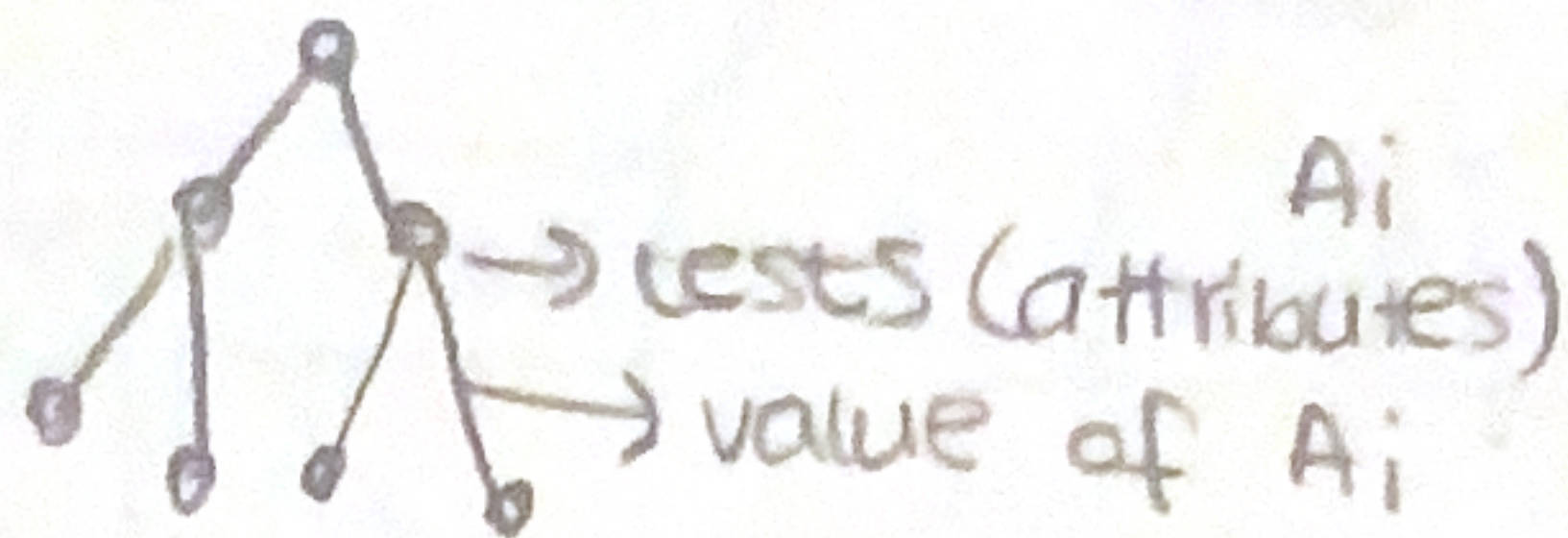
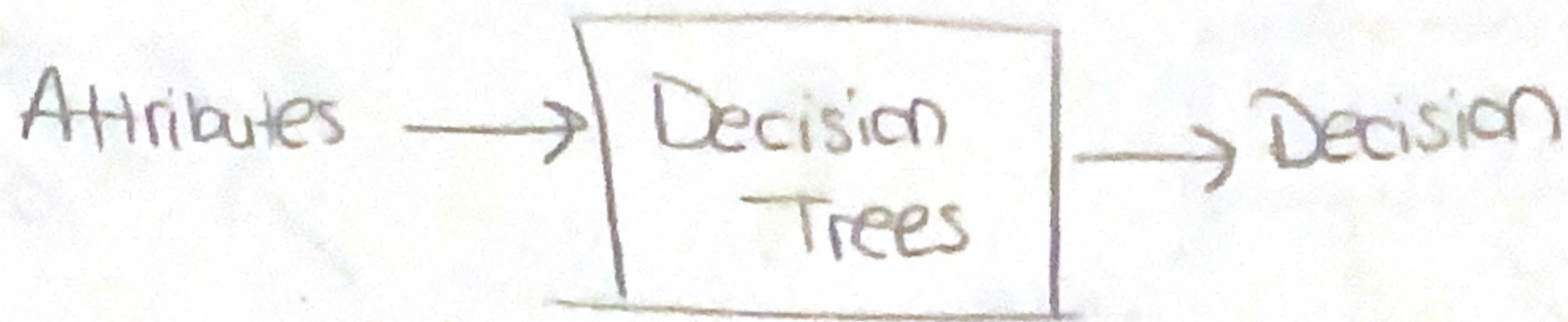


## Split Process





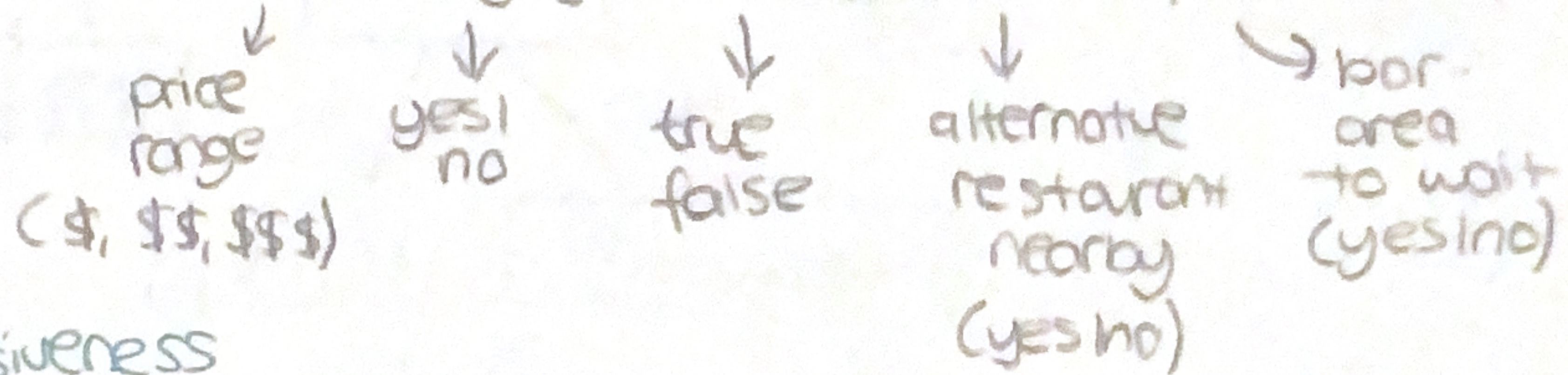
# Decision Trees



ex I Restaurant Wait

Goal Predicate  $\rightarrow$  'will wait

Attributes  $\rightarrow$  Price, Hungry, Fri/Sat, Alternate, Bar..



Expressiveness

The goal is true if input attributes satisfy one of the paths leading to a leaf with value true.

ex II Path = (Patrons = Full  $\wedge$  WaitEstimate = 0-10)  $\rightarrow$  bu true leaf ine given path lerden

Goal  $\leftrightarrow$  (Path1  $\vee$  Path2 ..) biri

n tane attribute'la boolean function setinde

$2^n$  fonksiyon var. n attribute'la truth table'da

$2^{2^n}$  farkli fonksiyon var. (intractable)