



To perform binary regression, we need to find one hyper-plane.

Why? The single hyper-plane is all that is necessary to explore the relationship between the two variables in the binary regression.

This means to perform a multi-class regression we need to find N-1 hyper-planes.

Why? The N-1 hyper-planes are allows us to explore the relationship between the N variables in the multi-class regression.

For our P(c|x) equation, to perform the multi-class regression we will need to find C-1 hyper-planes.

Why? In the multi-class regression of P(c|x) our Y has/ consists of C variables: therefore requiring C-1 hyper-planes to explore that relationship.

* How many hyperplanes
* How many per P(c|x)
* Explain

Task