Student T Distribution:

In Z stats, when we need to perform any statistical analysis using Z Score, we require (population standard deviation).

How do we perform any analysis when we don’t know the population standard deviation?

In this case, we use Student T distribution

t =

Where s is Sample Standard Deviation

In Z stats, we use the Z table.

Similarly in Student T distribution, we use T table.

An important parameter in the T table is Degree of Freedom.

Degree of Freedom(DOF) = n – 1

Example: There are three people in a room and there are three chairs to sit. The first person will have an option among three chairs to sit. Once he sits, the second person will have an option among two remaining chairs to sit on. Once the second person sits, the last person will have no option but only one chair to sit on. Therefore only 2 people have the freedom to choose their seats.

Degree of freedom = 3-1 = 2