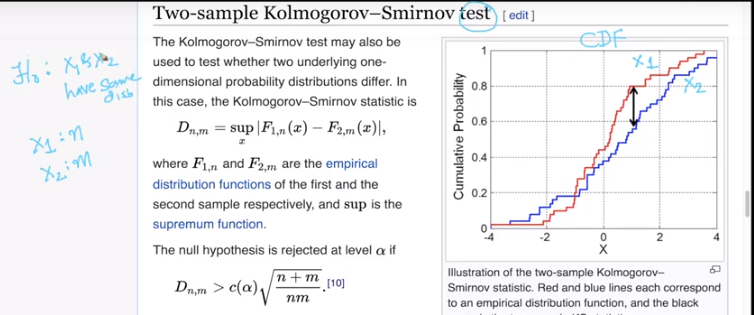
**TO understand K-S test for similarity of two distribution we will take an example and understand steps:**

**Step – 1:**

**Suppose we have two R.V with n and m no. of observations and we draw CDF for the same**

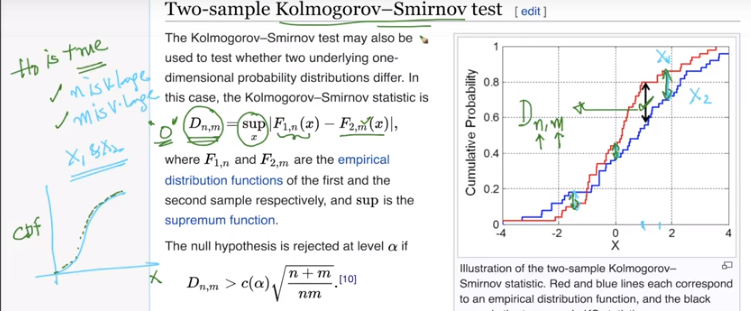


**Step-2:**

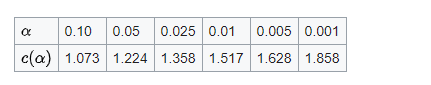
**First assume that the values of n and m are too large may be 5000 and 1000 than the CDF for both the R.V will be almost same(IF they are having same distribution) and so the value of D(n,m) will be 0.**

**NOTE:- D(n,m) is the maximum distance between the CDF of two R.V’s.**

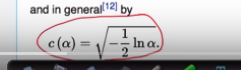
**In below graph in image the black line is the D(n,m)**



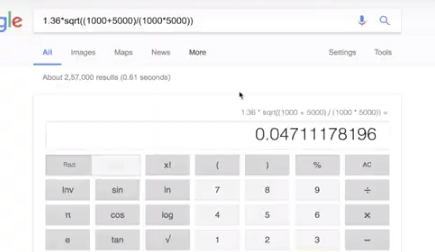
**The closed range formula which actually determines weather to accept or reject the hypothesis has variable c(alpha) and we can get its value by looking up into table which is already available.**



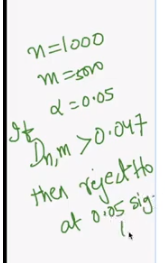
**And c(Alpha) is basically**



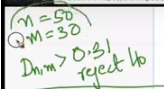
**Now putting the values in formula and computing the Range value for D(n,m)**



**We got D(n,m) > 0.047 which means if this condition is satisfied then we will reject our null hypothesis with 0.05 significance.**



**If we change the value of n and m for understanding the concept better than**

**we get D(n,m) > 0.31 which is almost 30% so this is very big difference we have got which means for 0 till 0.31 value of D(n,m) we will accept H0 and beyond that we will reject H0.**

**For more understanding:**

**When we reject our null hypothesis**

