Chi-Square Test(Example)

0.43, 0.09, 0.52, 0.98, 0.78, 0.44, 0.21, 0.12, 0.38, 0.67, 0.97, 0.46,
0.07, 0.18, 0.49, 0.47, 0.69, 0.99, 0.77, 0.76, 0.65, 0.14, 0.25, 0.37,
0.74, 0.03, 0.71, 0.28, 0.65, 0.50, 0.54, 0.13, 0.97, 0.17, 0.32, 0.91,
0.28, 0.39, 0.56, 0.73, 0.99, 0.71, 0.99, 0.64, 0.50, 0.66, 0.01, 0.24,
0.73, 0.15, 0.45, 0.10, 0.18, 0.82, 0.96, 0.43, 0.27, 0.34, 0.65, 0.79,
0.03, 0.49, 0.69, 0.85, 0.60, 0.93, 0.48, 0.42, 0.04, 0.46, 0.04, 0.91,
0.81, 0.62, 0.79, 0.88, 0.46, 0.74, 0.06, 0.11, 0.64, 0.76, 0.22, 0.43,
0.99, 0.20, 0.87, 0.50, 0.93, 0.24, 0.81, 0.94, 0.57, 0.94, 0.37, 0.50,
0.97, 0.26, 0.92, 0.87.

Where, α= 0.05.

Step 1: Define hypothesis.

S: 2: $E_i=N/n>=5$; $100/n>=5$ So, **n<=20.**

Step: 3:

Interval	O_i	$E_i=N/n=100/10$	$(O_i-E_i)^2/E_i$
(0.0,0.1)---1	8	10	0.4
(0.1,0.2)---2	9	10	0.1
(0.2,0.3)---3	10	10	0
(0.3,0.4)---4	6	10	1.6
(0.4,0.5)---5	13	10	0.9
(0.5,0.6)---6	8	10	0.4
(0.6,0.7)---7	11	10	0.1
(0.7,0.8)---8	12	10	0.4
(0.8,0.9)---9	7	10	0.9
(0.9,1.0)---10	16	10	3.6

$$X^2= 8.4$$

Step 4: α=0.05, n=10, (n-1)=10-1=9 in terms of LOS $\chi_{\alpha=0.05,\ 9}$ **=16.9**

Step 5: