Chi-Square Test

Step-1: Define the hypothesis for uniformity.

$H_0 = R_i \sim U(0,1)$ $[R_i = \text{Random}]$

$H_1 = R_i \not\sim U(0,1)$

Step-2: Devide the total no's of observations N into mutually exclusive equal numbered classes n, **N→ $E_i \geq 5$**

Step-3: Test Stats,

$$\chi^2 = \Sigma_{i=0}$$

Step-4: Determine Critical value given LOS with (n-1).

Step-5: $\chi^2 > \chi^2$ → H_0 rejected.

Else no difference between detected sample distribution & uniform distribution.