Glossary

1. **Symmetric distribution:** f(t) = f(-t) or f(x) = f(-x) where f is the density function of a random variable.
2. $S^2 = \frac{1}{n-1}\sum_{i=1}^{n}\left(x_i - \bar{x}\right)^2$ is an unbiased estimator of the population variance σ^2.
3. **Limiting case :** Here we try to find the distribution of a random variable when n is large.
4. **Jacobian transformation :** It is used to find the distribution of a transformed random variable.
5. **Mean deviation about mean =** E|X- mean(X)|, where X is a random variable.
6. **Degrees of freedom(d.f.):** Number of independent observations in the given set of data.
7. $\Gamma_n = (n-1)! = (n-1)\,\Gamma_{(n-1)}$.
8. **Heavier tails :** The probability curve which is more flat to produce values that fall far from its mean.
9. $B(\frac{1}{2},\frac{n}{2}) = \frac{\Gamma\frac{1}{2}\times\Gamma\frac{n}{2}}{\Gamma(\frac{n+1}{2})}$.
10. μ_r = The r^{th} central moments = $E\,[\,X - E(X)]^r$