**t-distribution:** It is the ratio of a standard normal variable to the square root of a chi-square variable divided by its degrees of freedom. If ZN(0,1) and U, then where U and Z are independent.

**Even order moments about mean**

**Question:** Using p.d.f show that t-distribution tends to normal distribution as n.

**Question:** Show that t-distribution tends to caushy distribution when n=1.

Which is the p.d.f of a standard caushy distribution.

For n=1, the mean of the t-distribution does not exists. This means that the mean of the caushy distribution does not exists.

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Square of t-distribution