

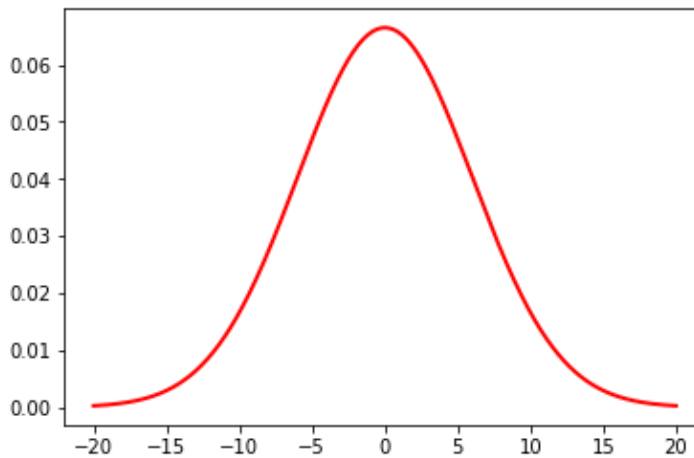
CISC 863 Quiz -2

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1) Prior Distribution

Initially we plot the prior distribution on parameter μ , with $\mu_0 = 0$ and variance = 6

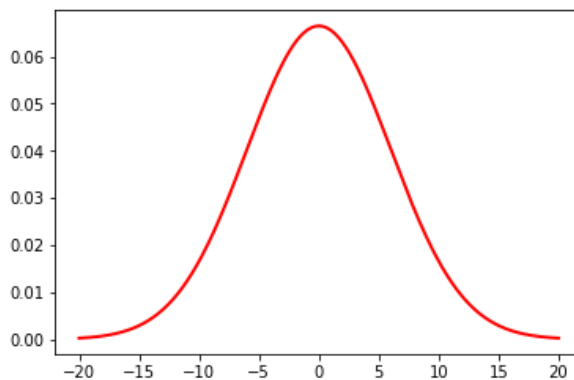
$N(0,6)$



2) Gaussian Likelihood

We plot the gaussian distribution with of observed data now with mean = mean of data and variance = 100

Mean = 2.938



3) Posterior for Gaussian,

We calculate the mean and variance for posterior and plot the distribution,

Mean = 2.58

Var = 4.39

