**AIM:-** TO GENERATE RAYLEIGH DISTRIBUTION RANDOM NUMBERS FROM GAUSSIAN DISTRIBUTION

clc;

clear;

gaussX1 = randn(1,100000);

gaussX2 = randn(1,100000);

rayleighY = sqrt(gaussX1.^2 + gaussX2.^2);

nbins = 500;

subplot(3,1,1)

hist(gaussX1,nbins);

title('Gaussian');

subplot(3,1,2)

hist(gaussX2,nbins);

title('Gaussian');

subplot(3,1,3)

hist(rayleighY,nbins);

title('Rayleigh');

