

```
0001 clc;
0002 disp("Abhinav Chuadhary EEE 54")
0003 mean = input("Enter Mean: ");
0004 sigma = input("Enter Sigma: ");
0005 lambda = input("Enter lambda: ");
0006
0007 x = linspace(-10, 10, 100);
0008 normal = (1/(sigma*sqrt(2 * %pi)))*exp(-0.5*((x-mean)/sigma).^2);
0009 exponential = lambda * exp(-lambda*x);
0010
0011 clf;
0012 subplot(2, 1, 1);
0013 plot(x, normal, '-v');
0014 xlabel('x');
0015 ylabel('Probability Density');
0016 title('Normal Distribution');
0017
0018 x = linspace(0, 10, 100);
0019 subplot(2, 1, 2);
0020 plot(x, exponential, '-b');
0021 xlabel('x');
0022 ylabel('Probability Density');
0023 title('Exponential Distribution');
```