```matlab
semilogy(EbNodB, BER_128_256, 'DisplayName', sprintf('Rate = 1/2, List Size
4')); % Rate 1/2
hold on;
semilogy(EbNodB, BER_L_8,  'DisplayName', sprintf('Rate = 1/2, List Size
8')); % Rate 1/2 with List sixe 8
hold on;
semilogy(EbNodB, BER_128_512, 'DisplayName', sprintf('Rate = 1/4')); % Rate
1/4
hold on;
semilogy(EbNodB, BER_128_1024, 'DisplayName', sprintf('Rate = 1/8')); % Rate
1/8
grid on;
xlabel('E_b/N_0 (dB)');
ylabel('BER');
legend('Location', 'southwest');
title('Polar Codes(SC List Decoding): BER vs E_b/N_0 (dB)');
```


Polar Codes(SC List Decoding): BER vs E_b/N_0 (dB)