```
exp8.sci 💥
   clc;
   clear all;
 2
 3 close;
 4 Eb=input('Enter·the·energy·per·bit·in·joules:');
 5 Nol=input ('Enter · the · PSD · of · noise · in · microwatts/hz:');
   No=No1*2;
   x=0:0.001: (Eb/No);
 7
 8 Pe_BPSK=0.5*erfc(sqrt(x));
 9 plot (x, Pe_BPSK);
10 xlabel('Signal - to - noise - ratio');
11 vlabel ('Probability of error Pe');
12 legend('Pe_BPSK');
13
Enter the energy per bit in joules:100
Enter the PSD of noise in microwatts/hz:4
-->
Graphic window number 0
        0.5
                                                                             Pe_BPSK
       0.45
        0.4
       0.35
    Probability of error Pe
        0.3
       0.25
        0.2
       0.15 -
        0.1
       0.05
         0 -
                                                                 10
                                                                                 13
                                                                                       14
                                         Signal to noise ratio
```