```
0001 clc
0002 clear
0001 function root=newtonraphson(f, df)
           tol=1.e-4
0002
0003
           maxit=5;
0004
         n=1:
0005
         x(n) = 3;
0006
         while (1)
0007
  x(n+1) = x(n) - (f(x(n))/df(x(n)));
0008
               if n==maxit then
0009
               break
0010
         end
0011
           n=n+1;
0012 end
0015 root=x(n+1);
0016 endfunction
0001 function \mathbf{f} = \mathbf{f1}(\mathbf{x})
0002
           f=x^3-2*x^2-2*x-1;
0003 endfunction
0001 function df = df1(x)
0002
           df = 3 * x^2 - 4 * x - 2;
0003 endfunction
0023 root=<u>newtonraphson(f1,df1);</u>
0024 root=round(root*10^5)/10^5;
0025 disp(root, "root of the equation=")
```