
```
clc
clear all
syms p q
p(q)=sin(q)+4*q^3-exp(q);
p2=diff(p);
x=.5;tol=10^(-8);i=0;
disp('Iter      x      Abs_error')
while(abs(double(p(x)))>tol)
    x=x-double(p(x)/p2(x));i=i+1;
    fprintf('%3d      %12.9f      %12.9f\n',i,x,abs(double(p(x))))
end
```

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