**PRACTICAL NO – 1(C)**

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Name :

Roll No :

Aim : Program to solve algebraic and transcendental equation by Newton Raphson method.

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function [**x**]=Newtonraphson(**xx**, **f**, **fp**)

N =100;eps =1.e-5;

maxval =10000.0;

while (N > 0)

xn = **xx**-f(**xx**)/**fp**(**xx**);

if(abs(f(xn)) < eps) then

**x** =xn

disp(100-N);

return(**x**);

end

if(abs(f(**xx**)) > maxval) then

disp(100-N);

error('sol div');

abort;

end

N =N-1;

**xx** =xn;

end

error('no conv');

abort;

endfunction

**OUTPUT :**

-1->deff('y=f(x)',['y=x^2-4\*x+2'])

-1->deff('y=fp(x)',['y=2\*x-4'])

-1->Newtonraphson(0,f,fp)

2.

ans =

0.5857843