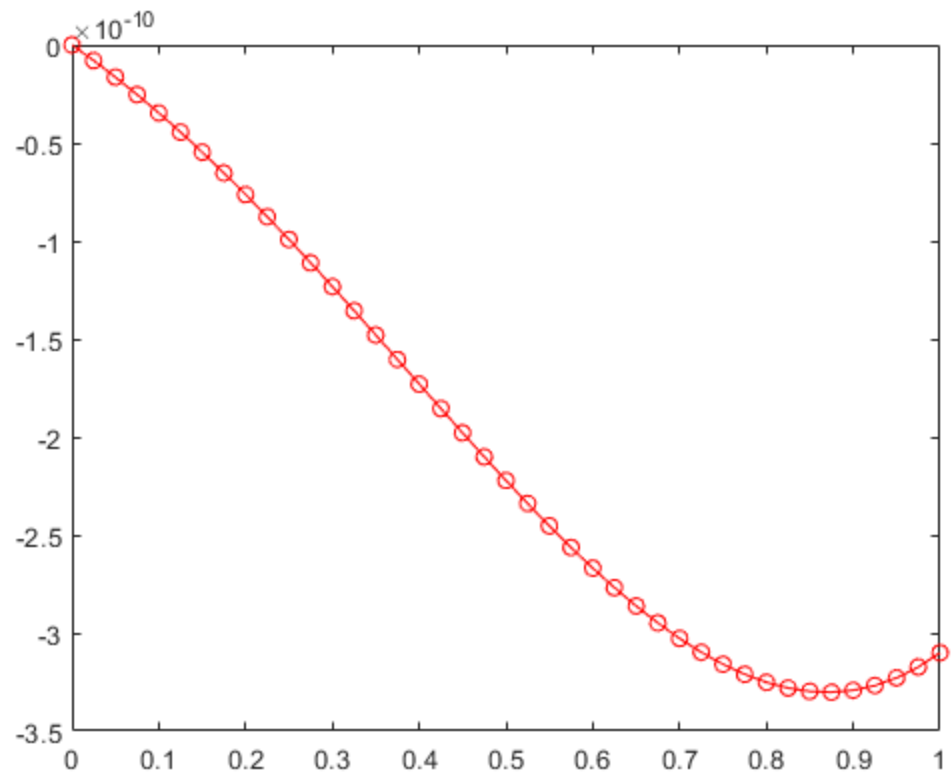

```

t0=0;
tf=1;
dt=0.025;
t=0:dt:1;
N=(tf-t0)/dt;
f=@(t,y) (y^2+2*t*y)/(3+t^2);
yExact=@(t) (3+t.^2)./(6-t);
y=zeros(1,N+1);
y(1)=1/2;

for n = 1:N
    k1=f(t(n),y(n));
    k2=f(t(n)+dt/2,y(n)+dt/2*k1);
    k3=f(t(n)+dt/2,y(n)+dt/2*k2);
    k4=f(t(n)+dt,y(n)+dt*k3);
    y(n+1)=y(n)+dt*(k1+2*k2+2*k3+k4)/6;
end

p1 = plot(t,yExact(t)-y, 'r-o');

```



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