function sim\_rk1\_methjod()

x1=input('Enter the vlaue of x1:');

y1=input('Enter the value of y1:');

z1=input('Enter the evalue of z1:');

h=input('Enter stepsize h:');

xn=input('Enter xn value:');

while x1<xn

ky1=h\*f(x1,y1,z1);

kz1=h\*g(x1,y1,z1);

ky2=h\*f(x1+h,y1+ky1,z1+kz1);

kz2=h\*g(x1+h,y1+ky1,z1+kz1);

ky=(ky1+ky2)/2;

kz=(kz1+kz2)/2;

y1=y1+ky;

z1=z1+kz;

x1=x1+h;

fprintf('\n%f %f %f',x1,y1,z1);

end

fprintf('\nat xn=%f, yn=%f',x1,y1,z1);

end

function s=f(x,y,z)

s=y\*z;

end

function w=g(x,y,z)

w=x\*y

end

% OUTPUT

% Enter the vlaue of x1:0

% Enter the value of y1:1

% Enter the evalue of z1:1

% Enter stepsize h:0.1

% Enter xn value:0.2

%

% w =

%

% 0

%

%

% w =

%

% 0.1100

%

%

% 0.100000 1.105000 1.005500

% w =

%

% 0.1105  
%

%

% w =

%

%

%

%

0.2432

% 0.200000 1.222366 1.023186

% at xn=0.200000, yn=1.222366

% at xn=1.023186, yn=>>