ASSIGNMENT NO:-

PROGRAM NO:-

```
%Program. GAUSS SEIDEL
%Name:
%Roll No.:
%I/P: Mac iterations, Equations of x,y,z.

function[]=PSJ_GS(fx1,fx2,fx3,n)
x1=0;
x2=0;
x3=0;
for i=1:1:n;
   x1=fx1(x2,x3);
   x2=fx2(x1,x3);
   x3=fx3(x1,x2);
   fprintf('\n Itr.No.=%0.1f  x1=%f   x2=%f   x3=%f',i,x1,x2,x3);
end
fprintf('x1=%f   x2=%f   x3=%f',x1,x2,x3);
%PSJ_GS(@(x2,x3)(28-2*x2+3*x3)/10,@(x1,x3)(30-3*x1-3*x3)/21,@(x1,x2)(25+2*x1-
3*x2)/15,10)
%Itr.No.=1.0  x1=2.800000   x2=1.028571   x3=1.834286

% Itr.No.=2.0  x1=3.144571   x2=0.717306   x3=1.942482

 %Itr.No.=3.0  x1=3.239283   x2=0.688319   x3=1.960907

% Itr.No.=4.0  x1=3.250608   x2=0.684069   x3=1.963267

 %Itr.No.=5.0  x1=3.252166   x2=0.683509   x3=1.963587

% Itr.No.=6.0  x1=3.252374   x2=0.683434   x3=1.963630

% Itr.No.=7.0  x1=3.252402   x2=0.683424   x3=1.963635

% Itr.No.=8.0  x1=3.252406   x2=0.683423   x3=1.963636

 %Itr.No.=9.0  x1=3.252406   x2=0.683422   x3=1.963636

% Itr.No.=10.0  x1=3.252406   x2=0.683422   x3=1.963636 x1=3.252406   x2=0.683422
x3=1.963636>>
```