**NAME : PARESH KALINANI**

**CLASS : FE5**

**ROLL NO. : 23**

-6->deff('f=g(x,y)','f=x+(3\*y)');

-6->x0=0;

-6->disp('x0=');

x0=

-6->disp(x0);

0.

-6->y0=1;

-6->disp('y0=');

y0=

-6->disp(y0);

1.

-6->h=0.05;

-6->disp('h=');

h=

-6->disp(h);

0.05

-6->xn=0.1;

-6->disp('xn=');

xn=

-6->disp(xn);

0.1

-6->n=(xn-x0)/h;

-6->disp('n=');

n=

-6->disp(n);

2.

-6->for j=1:n,

-6->x1=x0+h;

-6->y1=y0+h\*g(x0,y0);

-6->for i=1:4,

-6->y11=y0+h/2\*(g(x0,y0)+g(x1,y1));

-6->disp('x=');

-6->disp(x1);

-6->disp('y=');

-6->disp(y11);

-6->y1=y11;

-6->end

-6->x0=x1;

-6->y0=y1;

-6->end

x=

0.05

y=

1.1625

x=

0.05

y=

1.1634375

x=

0.05

y=

1.1635078

x=

0.05

y=

1.1635131

x=

0.1

y=

1.3550671

x=

0.1

y=

1.3561566

x=

0.1

y=

1.3562383

x=

0.1

y=

1.3562444