**EXPERIMENT NO: 1**

**DDA LINE DRAWING ALGORITHM**

#include<stdio.h>

#include<conio.h>

#include<graphics.h>

void main(){

int gd=DETECT,gm;

initgraph(&gd,&gm,"");

int x1,y1,x2,y2;

printf("Enter the first coordinates");

scanf("%d%d",&x1,&y1);

printf("Enter the second coordinates");

scanf("%d%d",&x2,&y2);

int dx=x2-x1;

int dy=y2-y1;

int steps;

if(dx>dy)

steps=dx;

else

steps=dy;

float xincr=dx/steps;

float yincr=dy/steps;

float xnew=x1,ynew=y1;

int x,y;

putpixel(x1,y1,WHITE);

for(int i=0;i<steps;i++)

{

xnew=xnew+xincr;

ynew=ynew+yincr;

x=int(xnew+0.5);

y=int(ynew+0.5);

putpixel(x,y,WHITE);

}

getch();

closegraph();

}

**OUTPUT**

