**BLA ALGORITHM**

**Source code:**

//---------------------------------------------------------------------------

#include <vcl.h>

#pragma hdrstop

#include "BLA.h"

//---------------------------------------------------------------------------

#pragma package(smart\_init)

#pragma resource "\*.dfm"

int x,y,x1,y1,x2,y2,dx,dy,p,pk,ix,iy,i;

TForm1 \*Form1;

//---------------------------------------------------------------------------

\_\_fastcall TForm1::TForm1(TComponent\* Owner)

: TForm(Owner)

{

}

//---------------------------------------------------------------------------

void \_\_fastcall TForm1::Button1Click(TObject \*Sender)

{

x1=StrToInt(Edit1->Text);

y1=StrToInt(Edit2->Text);

x2=StrToInt(Edit3->Text);

y2=StrToInt(Edit4->Text);

dx=abs(x2-x1);

dy=abs(y2-y1);

x=x1;

y=y1;

Image1->Canvas->Pixels[x][y]=RGB(115,145,100);

p=2\*dy-dx;

for (i=1;i<=dx;i++)

{

if(p<0)

{

x=x1+1;

y=y1;

x1=x;

y1=y;

pk=p+2\*dy;

Image1->Canvas->Pixels[x][y]=RGB(115,145,100);

}

else

{

x=x1+1;

y=y1+1;

x1=x;

y1=y;

pk=p+2\*dy-2\*dx;

Image1->Canvas->Pixels[x][y]=RGB(115,145,100);

}

}

}

//---------------------------------------------------------------------------

**Output:**

