```
#include <GL/glut.h>
#include <stdio.h>
int x1, y1, x2, y2;
void display(void)
{
  int dx = x2 - x1;
  int dy = y2 - y1;
  int d = 2 * dy - dx;
  int incrE = 2 * dy;
  int incrNE = 2 * (dy - dx);
  int x = x1, y = y1;
  glClear(GL_COLOR_BUFFER_BIT);
  glBegin(GL_POINTS);
  glVertex2i(x, y);
  while (x < x2)
  {
    if (d \le 0)
    {
       d += incrE;
       χ++;
    }
    else
       d += incrNE;
       χ++;
```

```
y++;
    glVertex2i(x, y);
  }
  glEnd();
  glFlush();
}
void init()
{
  glClearColor(0.0, 0.0, 0.0, 0.0);
  glMatrixMode(GL_PROJECTION);
  gluOrtho2D(0, 640, 0, 480);
}
int main(int argc, char **argv)
{
  printf("Enter the value of x1: ");
  scanf("%d", &x1);
  printf("Enter the value of y1: ");
  scanf("%d", &y1);
  printf("Enter the value of x2: ");
  scanf("%d", &x2);
  printf("Enter the value of y2: ");
  scanf("%d", &y2);
  glutInit(&argc, argv);
```

```
glutInitDisplayMode(GLUT_SINGLE | GLUT_RGB);
  glutInitWindowSize(500, 500);
  glutInitWindowPosition(0, 0);
  glutCreateWindow("Lab Task- Bresenham's Line Drawing Algorithm");
  init();
  glutDisplayFunc(display);
  glutMainLoop();
  return 0;
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                     main.cpp ×
                                                 Lab Task-Bresenham's Line Drawing Algorithm
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→ Workspace

                        nter the value of x1: 110
inter the value of y1: 50
inter the value of x2: 280
inter the value of y2: 120
🛓 🛂 Brasenham Algorithm
 Sources
     main.cpp
                                                                                WINDOWS-1252 Line 57, Column 32
                                                                                                                                 Read/Write
```