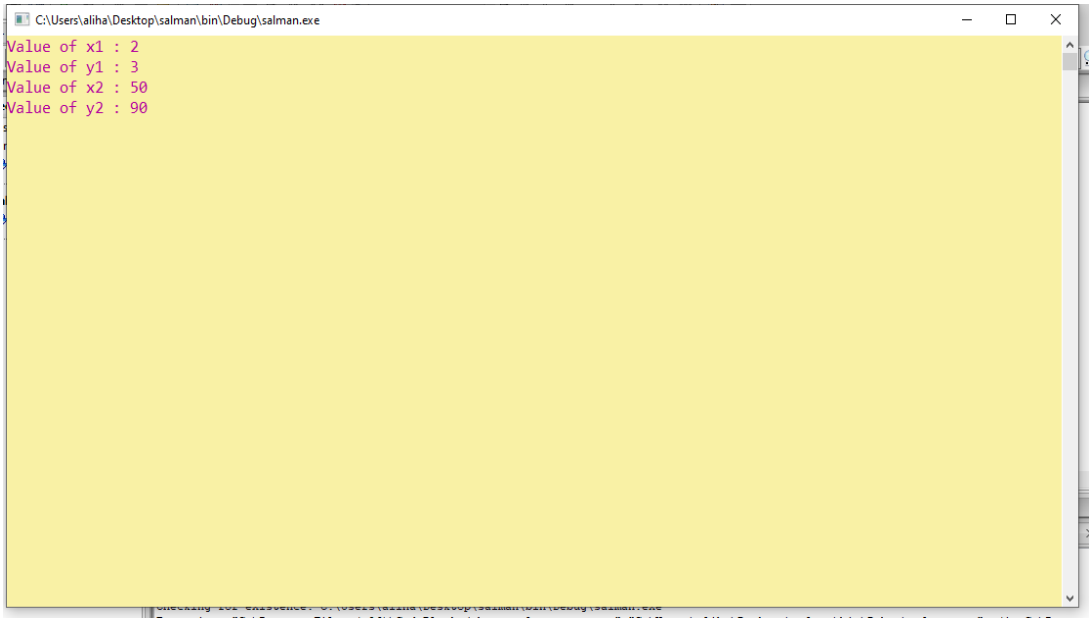
Source Code

```
#include<windows.h>
#include<stdlib.h>
#include<stdio.h>
#include <GL/gl.h>
#include <GL/glut.h>
float x1, x2, y1, y2;
void TakeInput()
{
printf("Value of x1 : ");
scanf("%f", & x1);
printf("Value of y1 : ");
scanf("%f", & y1);
printf("Value of x2 : ");
scanf("%f", & x2);
printf("Value of y2 : ");
scanf("%f", & y2);
}
void display(void)
{
float curr_x = x1;
float curr_y = y1;
```

```
glBegin(GL_POINTS);
glVertex2i(x1, y1);
glEnd();
while(curr_x != x2 && curr_y != y2)
{
float m = (y2 - curr_y) / (x2 - curr_x);
if(m > 1)
{
curr_x = curr_x + (1.0 / m);
curr_y = curr_y + 1;
}
else if(m > 0 && m < 1)
{
curr_x = curr_x + 1;
curr_y = curr_y + m;
}
glBegin(GL_POINTS);
glVertex2i(curr_x, curr_y);
glEnd();
}
glFlush();
}
```

```
void myInit (void) {
glClear(GL_COLOR_BUFFER_BIT);
glClearColor(0, 0, 0, 0);
glMatrixMode(GL_PROJECTION);
glLoadIdentity();
gluOrtho2D(-100, 100, 100, -100);
}
int main(int argc, char ** argv) {
TakeInput();
glutInit( & argc, argv);
glutInitDisplayMode(GLUT_SINGLE | GLUT_RGB);
glutInitWindowSize(500, 500);
glutInitWindowPosition(100, 100);
glutCreateWindow("");
myInit ();
glutDisplayFunc(display);
glutMainLoop();
}
```

Input:



Output: