Nama : Rosyidah Amini Suci

NRP : 2103181045

Kelas : 3 D3 IT B

GRAFIKA KOMPUTER

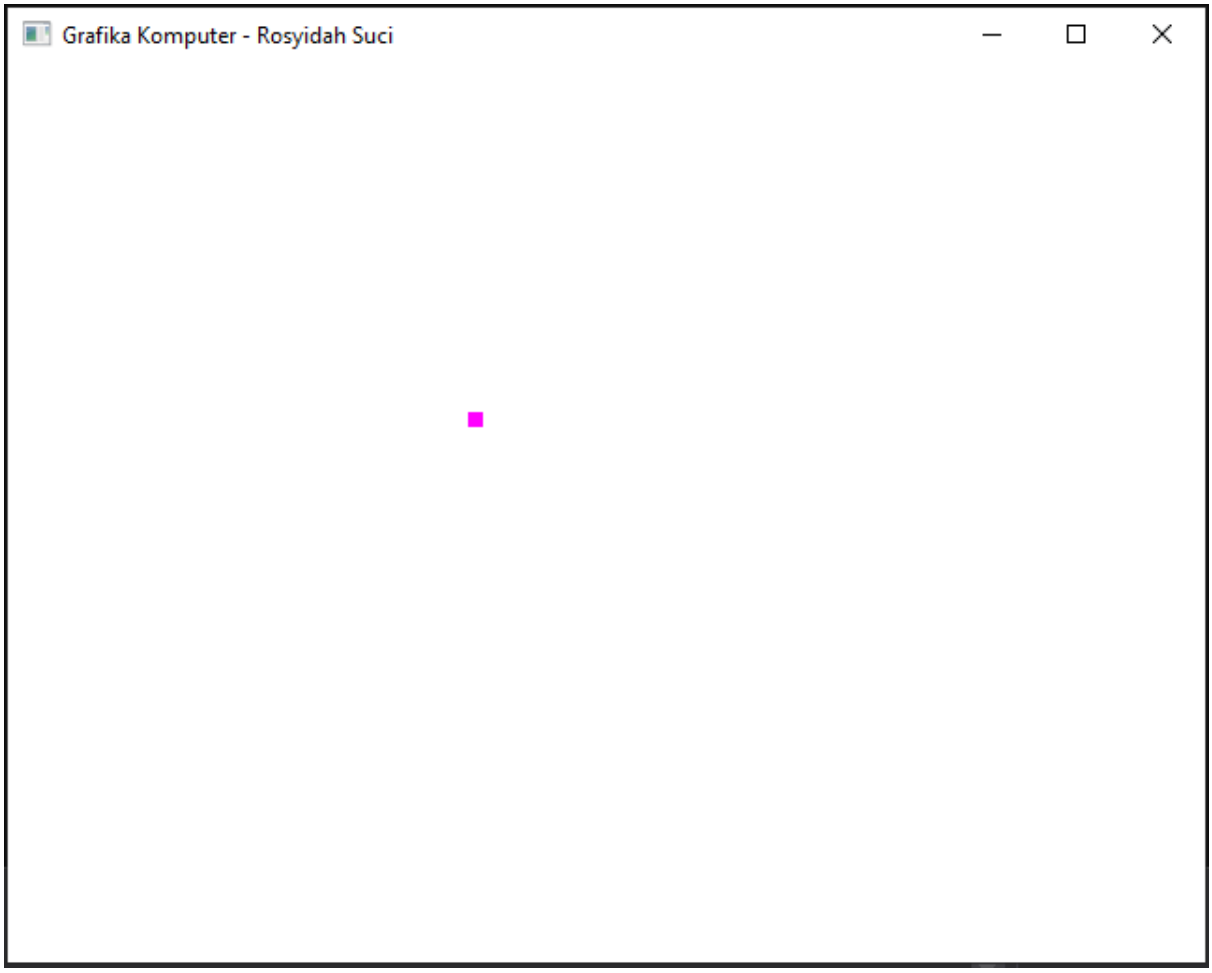
"PRIMITIV DRAWING"

- **Source Code**

```
#include <GL/glut.h>
void userdraw(void);
void drawDot(float x, float y)
{
	glBegin(GL_POINTS);
	glVertex2f(250, 50);
	glEnd();
	glPointSize(7);
}
void setColor(float red, float green, float blue)
{
	glColor3f(red, green, blue);
}
void userdraw()
{
	glPointSize(8);
	setColor(1., 0., 1.);
	for (int i = 0; i < 20; i += 5)
	{
		for (int j = 0; j < 20; j += 5)
		{
			drawDot(10.0 + i, 10.0 + j);
		}
	}
}

void display(void)
{	//clear screen
	glClear(GL_COLOR_BUFFER_BIT);
	userdraw();
	glutSwapBuffers();
}
int main(int argc, char** argv)
{
	glutInit(&argc, argv);
	glutInitDisplayMode(GLUT_DOUBLE | GLUT_RGB);
	glutInitWindowSize(640, 480);
	glutInitWindowPosition(100, 150);
	glutCreateWindow("Grafika Komputer - Rosyidah Suci");
	glClearColor(1.0, 1.0, 1.0, 0.0);
	gluOrtho2D(0., 640., -240., 240.);
	glutIdleFunc(display);
	glutDisplayFunc(display);
	glutMainLoop();
	return 0;
}
```

- Output

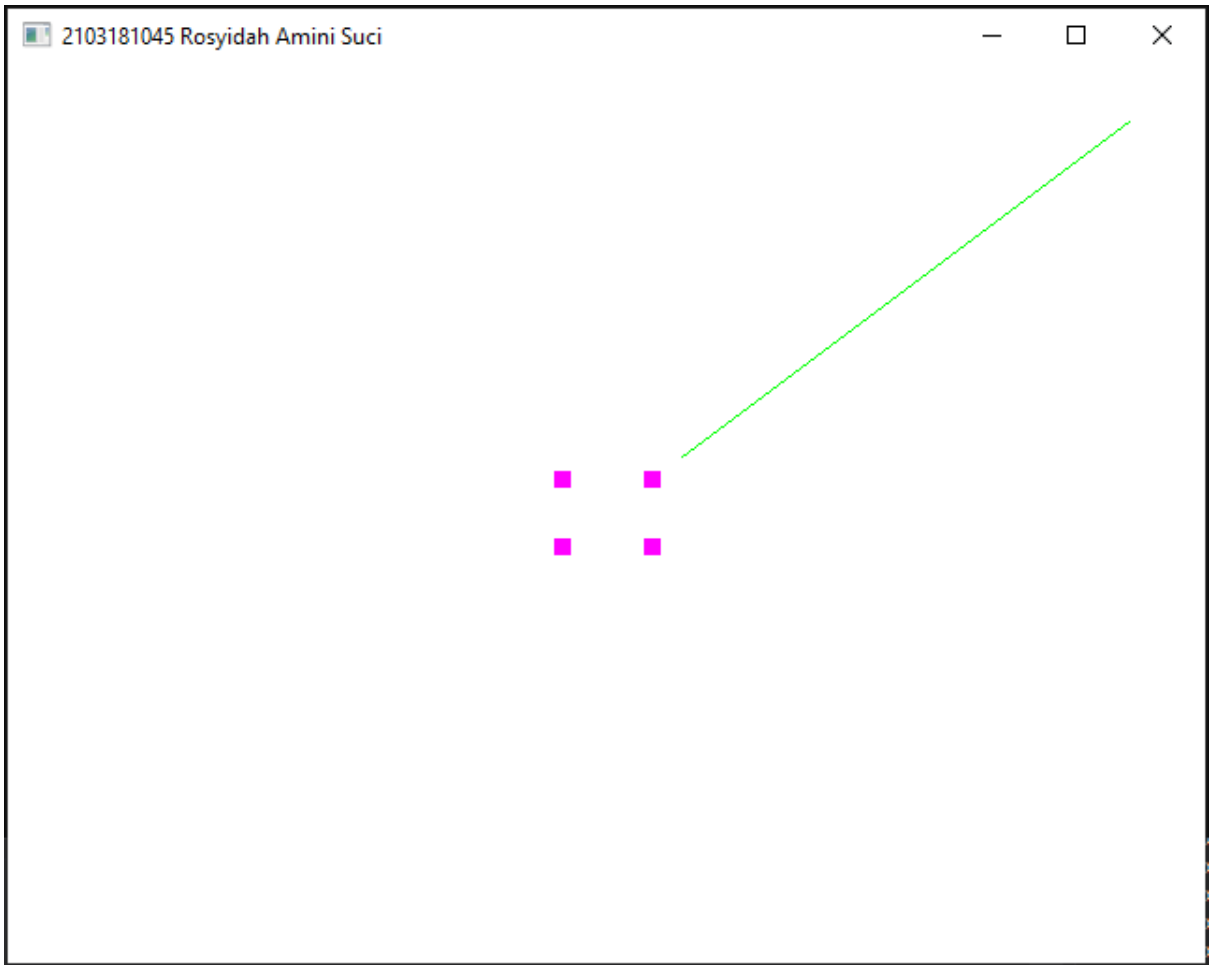


- **Source Code**

```
#include <GL/glut.h>
void titik_garis(void) {
	glColor3f(1.0, 0.0, 1.0);
	glPointSize(9);
	glBegin(GL_POINTS);
	glVertex3f(15.0, 15.0, 0.0);
	glVertex3f(-15.0, 15.0, 0.0);
	glVertex3f(-15.0, -15.0, 0.0);
	glVertex3f(15.0, -15.0, 0.0);
	glEnd();
	glColor3f(0.0, 1.0, 0.0);
	glBegin(GL_LINES);
	glVertex3f(25.0, 25.0, 0.0);
	glVertex3f(175.0, 175.0, 0.0);
	glEnd();
	glFlush();
}
void display(void) {
	glClear(GL_COLOR_BUFFER_BIT);
	titik_garis();
}
void Initialize(void) {
	glClearColor(1.0, 1.0, 1.0, 0.0);
	glMatrixMode(GL_PROJECTION);
	glLoadIdentity();
	gluOrtho2D(-200, 200, -200, 200);
}
```

```
void Initialize(void) {
	glClearColor(1.0, 1.0, 1.0, 0.0);
	glMatrixMode(GL_PROJECTION);
	glLoadIdentity();
	gluOrtho2D(-200, 200, -200, 200);
}
int main(int argc, char** argv) {
	glutInit(&argc, argv);
	glutInitDisplayMode(GLUT_SINGLE | GLUT_RGB);
	glutInitWindowPosition(100, 150);
	glutInitWindowSize(640, 480);
	glutCreateWindow("2103181045 Rosyidah Amini Suci");
	Initialize();
	glutDisplayFunc(display);
	glutMainLoop();
	return 0;
}
```

- **Output**



- **Source Code**

```
#include <GL/glut.h>
void tv_rusak(void) {
	glColor3f(1.0, 0.0, 0.0);
	glPointSize(5);
	glBegin(GL_POINTS);
	for (int i = 0; i < 220; i++) {
		float a = (float)(rand() % 100);
		float b = (float)(rand() % 100);
		glVertex2f(a, b);
		glVertex2f(-a, b);
		glVertex2f(a, -b);
		glVertex2f(-a, -b);
	}
	glEnd();
	glFlush();
}
void display(void) {
	glClear(GL_COLOR_BUFFER_BIT);
	tv_rusak();
}
void Initialize(void) {
	glClearColor(1.0, 1.0, 1.0, 0.0);
	glMatrixMode(GL_PROJECTION);
	glLoadIdentity();
	gluOrtho2D(-200, 200, -200, 200);
}
int main(int argc, char** argv) {
	glutInit(&argc, argv);
	glutInitDisplayMode(GLUT_SINGLE | GLUT_RGB);
	glutInitWindowPosition(200, 200);
	glutInitWindowSize(400, 400);
	glutCreateWindow("2103181045 Rosyidah Amini Suci");
	Initialize();
	glutDisplayFunc(display);
	glutMainLoop();
	return 0;
}
```

- **Output**