TUGAS 3
KOMPUTER GRAFIK (B)

DISUSUN OLEH:

Rezki anwar - 4520210033

Teknik Informatika Universitas Pancasila
Tahun ajaran 2022/2023

CODE PROGRAM:

```c
#include<stdlib.h>
#include<GL/glut.h>
static int year = 0, day = 0;
void init(void)
{
    glClearColor (0.0, 0.0, 0.0, 0.0);
    glShadeModel (GL_FLAT);
}
void display(void)
{
    glClear (GL_COLOR_BUFFER_BIT);
    glColor3f (1.0, 1.0, 1.0);
    glPushMatrix();
    glutWireSphere(1.0, 20, 16); /* draw sun */
    glRotatef ((GLfloat) year, 0.0, 1.0, 0.0);
    glTranslatef (2.0, 0.0, 0.0);
    glRotatef ((GLfloat) day, 0.0, 1.0, 0.0);
    glutWireSphere(0.2, 10, 8); /* draw smaller planet */
    glPopMatrix();
    glutSwapBuffers();
}
void reshape (int w, int h)
{
    glViewport (0, 0, (GLsizei) w, (GLsizei) h);
    glMatrixMode (GL_PROJECTION);
    glLoadIdentity ();
    gluPerspective(60.0, (GLfloat) w/(GLfloat) h, 1.0, 20.0);
    glMatrixMode(GL_MODELVIEW);
    glLoadIdentity();
    gluLookAt (0.0, 0.0, 5.0, 0.0, 0.0, 0.0, 0.0, 1.0, 0.0);
}
void keyboard (unsigned char key, int x, int y)
{
    switch (key) {
        case 'd':
            day = (day + 10) % 360;
            glutPostRedisplay();
            break;
        case 'D':
            day = (day - 10) % 360;
            glutPostRedisplay();
            break;
        case 'y':
            year = (year + 5) % 360;
            glutPostRedisplay();
            break;
```

```
    case 'Y':
        year = (year - 5) % 360;
        glutPostRedisplay();
        break;
    default:
        break;
    }
}
int main(int argc, char** argv)
{
    glutInit(&argc, argv);
    glutInitDisplayMode (GLUT_DOUBLE | GLUT_RGB);
    glutInitWindowSize (500, 500);
    glutInitWindowPosition (100, 100);
    glutCreateWindow ("4520210033_Rezki anwar");
    init ();
    glutDisplayFunc(display);
    glutReshapeFunc(reshape);
    glutKeyboardFunc(keyboard);
    glutMainLoop();
    return 0;
}
```

RUN PROGRAM:
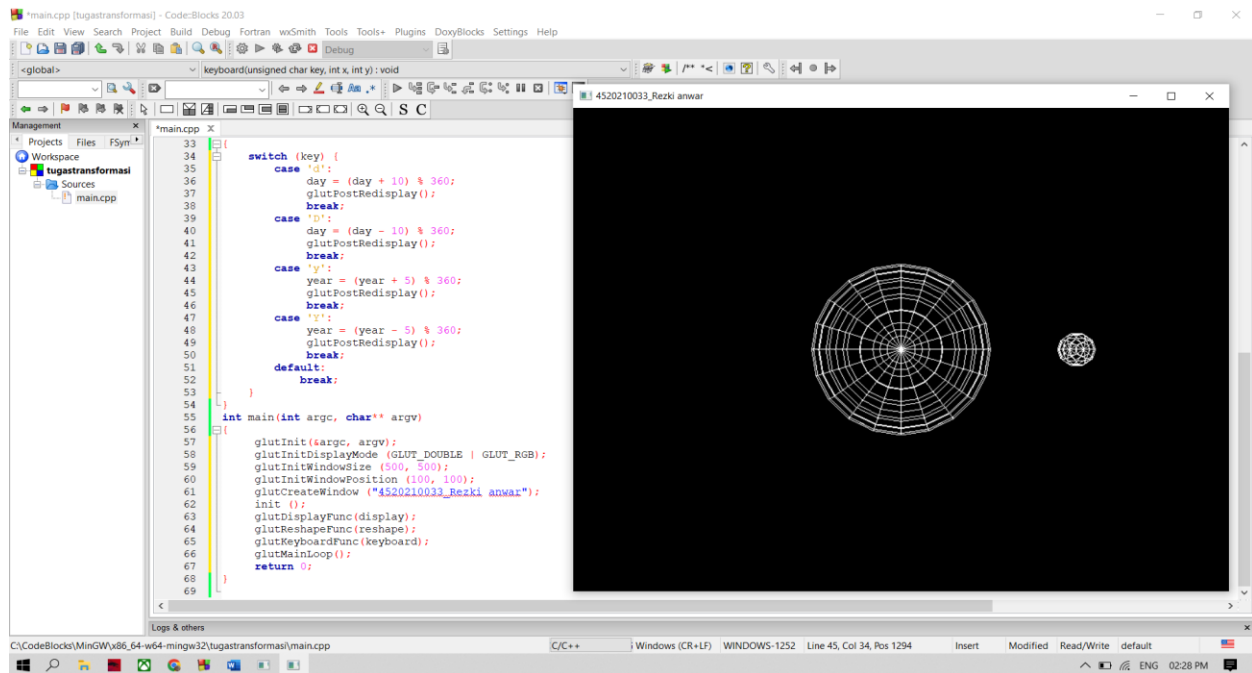
tekan tombol 'y', 'Y', 'd' dan 'D' untuk menggerakkan objek: