

```
void aufgabe1()
{
    sp.setPosition(
        window.getWidth() / 2 - 50,
        window.getHeight() / 2 - 50);
    while (true)
    {
        if (window.mouseButton1())
        {
            sp.setPosition(
                window.getMouseX(),
                window.getMouseY());
        }
        window.clear();
        sp.draw(window);
        window.paintFrame();
    }
}
```

```
void aufgabe3()
{
    sp.setPosition(
        window.getWidth() / 2 - 50,
        window.getHeight() / 2 - 50);
    sp.setSpeed(0);
    while (true)
    {
        if (window.isKeyDown(
            KeyEvent.VK_RIGHT))
        {
            sp.dreheRechts(5);
        }
        if (window.isKeyDown(
            KeyEvent.VK_LEFT))
        {
            sp.dreheLinks(5);
        }
        if (window.isKeyDown(
            KeyEvent.VK_UP))
        {
            sp.schneller(0.25);
        }
        if (window.isKeyDown(
            KeyEvent.VK_DOWN))
        {
            sp.langsamer(0.25);
        }
        sp.bewege();

        window.clear();
        sp.draw(window);
        window.paintFrame();
    }
}
```

```
void aufgabe2()
{
    sp.setPosition(
        window.getWidth() / 2 - 50,
        window.getHeight() / 2 - 50);
    sp.setSpeed(5);

    while (true)
    {
        if (window.isKeyDown(
            KeyEvent.VK_RIGHT))
        {
            sp.setRichtung(0);
            sp.bewege();
        }
        if (window.isKeyDown(
            KeyEvent.VK_LEFT))
        {
            sp.setRichtung(180);
            sp.bewege();
        }
        if (window.isKeyDown(
            KeyEvent.VK_UP))
        {
            sp.setRichtung(270);
            sp.bewege();
        }
        if (window.isKeyDown(
            KeyEvent.VK_DOWN))
        {
            sp.setRichtung(90);
            sp.bewege();
        }

        window.clear();
        sp.draw(window);
        window.paintFrame();
    }
}
```

```
void aufgabe4()
{
    float r;
    Color farbe;
    int mausrad;

    r = 0.5f;
    while (true)
    {
        farbe = new Color(r, r, r);
        window.clear(farbe);
        mausrad = window.mouseWheel();
        if (mausrad < 0)
        {
            r -= 0.05f;
            if (r <= 0.0f)
            {
                r = 0.0f;
            }
        }
        if (mausrad > 0)
        {
            r += 0.05f;
            if (r >= 1.0f)
            {
                r = 1.0f;
            }
        }
        window.paintFrame();
    }
}
```

```
void aufgabe5()
{
    int x1, y1, x2, y2;
    Color cBlau;

    cBlau = new Color(0f, 0f, 1f);

    x1 = window.getWidth() / 2;
    y1 = window.getHeight() / 2;

    while (true)
    {
        if (window.mouseButton1())
        {
            x2 = window.getMouseX();
            y2 = window.getMouseY();
            window.drawLine(
                x1, y1, x2, y2, cBlau);
            x1 = x2;
            y1 = y2;
        }
        window.paintFrame();
    }
}
```