

## // O implementare reutilizabila a transformarilor 2D

```
package grafica;
```

```
import java.awt.geom.*;  
import java.awt.*;
```

```
public final class Transform2D {
```

```
public static Point2D.Float rotatie(Point2D.Float P, Point2D.Float C, float cosu, float sinu)
```

```
{  
    Point2D.Float Prot = new Point2D.Float(0, 0);  
    float xx;  
    xx = P.x;  
    Prot.x = xx * cosu - P.y * sinu + C.x - C.x * cosu + C.y * sinu;  
    Prot.y = xx * sinu + P.y * cosu + C.y - C.x * sinu - C.y * cosu;  
    return Prot;  
}
```

```
public static Point2D.Float scalare(Point2D.Float P, Point2D.Float C, float sx, float sy)
```

```
{  
    Point2D.Float Pscal = new Point2D.Float(0, 0);  
  
    return Pscal;  
}
```

```
public static Point2D.Float translatie(Point2D.Float P, Point2D.Float V)
```

```
{  
    Point2D.Float Ptran = new Point2D.Float(0, 0);  
    Ptran.x = P.x + V.x;  
    Ptran.y = P.y + V.y;  
    return Ptran;  
}
```