

# **C2I**

**(Group 2)**

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# 1. Load CDY Board from file

Clone JSXGraph-Project from git:

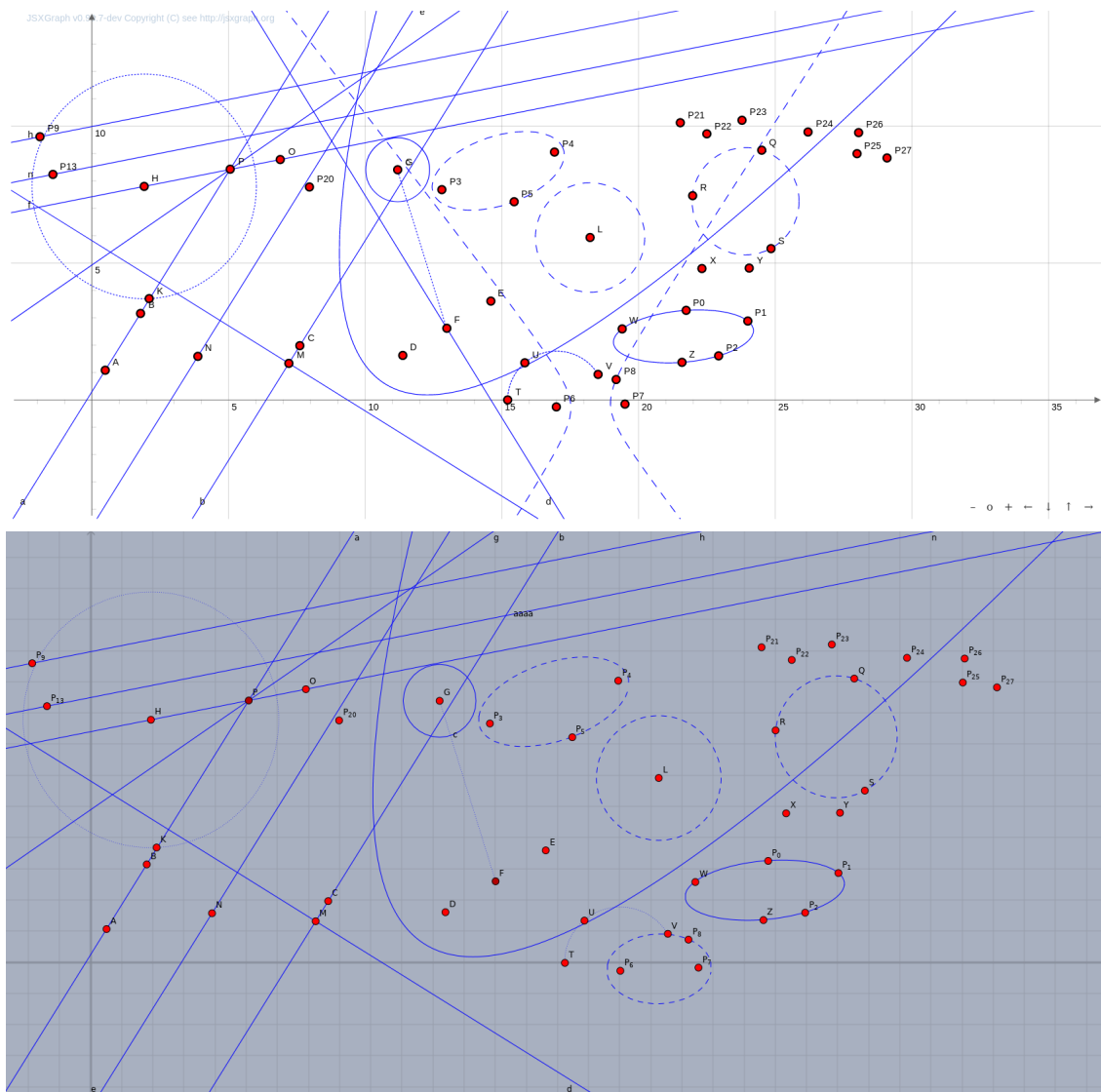
```
git clone https://github.com/jsxgraph/jsxgraph
```

Patch the file `jsxgraph/src/reader/cinderella.js` (`cinderella.patch` in Folder `CinderellaReaderPatch`)

```
patch < cinderella.patch
```

Test with JXG. `JSXGraph.loadBoardFromFile`

**Load Cinderella Board From File**



Cinderella Elements can be loaded with JSXGraph

Cinderella Element	Loadable with JSXGraph	Notice
FreePoint	✓	free point
Join	✓	line
Segment	✓	segment
CircleMP	✓	circle, defined by two points
CircleByFixedRadius	✓	circle, defined by point and fixed radius
CircleByRadius	✓	circle, defined by point and fixed radius
PointOnCircle	✓	glider on a circle
PointOnLine	✓	glider on a line
Mid	✓	mid point
CircleBy3	✓	circumcircle
Parallel	✓	parallel
Orthogonal	✓	normal
ConicBy5	✓	conic defined by five points
ConicFoci	✓	ellipse with foci and points on the conic
ConicFociH	✓	hyperbola with foci and points on the conic
ConicParabolaPL	✓	parabola with focus and directrix
Poly	✓	polygon
Arc	✓	arc
Through	✓	line defined by one point
Compass	✓	circle defined by compass
AngularBisector	✓	angular bisector
Meet	✓	intersect two lines
IntersectionConicLine	✓	intersection circle/line
IntersectionCircleCircle	✓	intersection circle/circle
LineByFixedAngle	✗	line by fixed angle

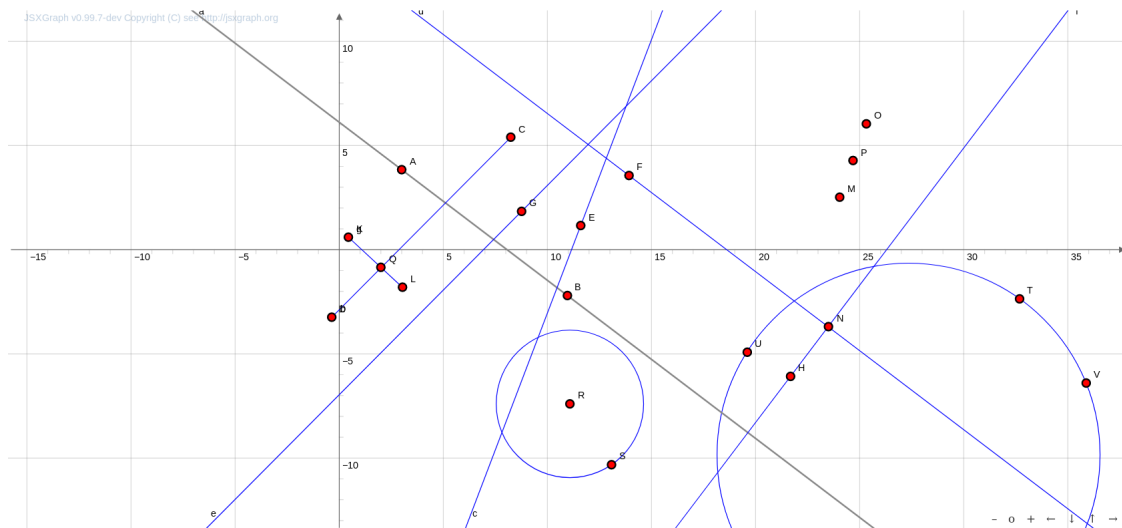
## 2.Convert CDY to I2G

Usage:

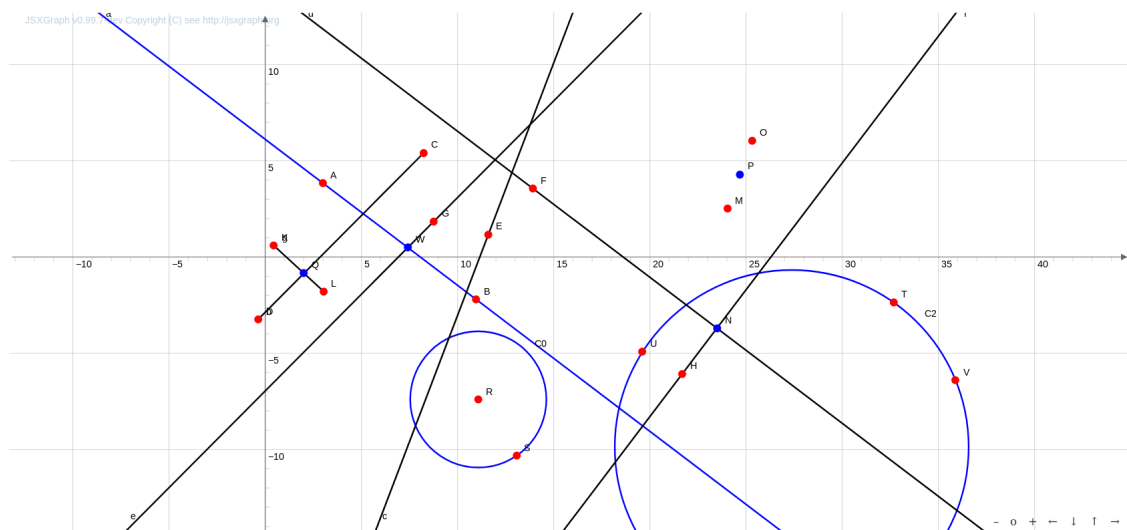
```
java C2I <path to cinderella file> <path to save intergeo file>
```

Test with JXG.JSXGraph.loadBoardFromFile

**Load Cinderella Board From File**



**Load Intergeo Board From File**



Cinderella Elements could be converted

Cinderella Element	Convertible	Corresponding Intergeo Element
FreePoint	✓	free_point
Meet	✓	point_intersection_of_two_lines
Mid	✓	midpoint_of_two_points
Join	✓	line_through_two_points
Segment	✓	line_segment_by_points
Through	✓	line
Parallel	✓	line_parallel_to_line_through_point
Orthogonal	✓	line_perpendicular_to_line_through_point
AngularBisector	✓	line_angular_bisectors_of_two_lines
CircleMP	✓	circle_by_center_and_point
CircleBy3	✓	circle_by_three_points
Other Elements	✗	
Elements Attributes	✗	