TIPO (Point)

+ Funzioni

```
type Point struct {
        x, y float64
}
```

```
func Dist(p1, p2 Point) float64 {

}
...
        var p1, p2 Point
             :
        d = point.Dist(p1, p2)
```

```
func (p1 Point) Dist(p2 Point) float64 {

}
...
        var p1, p2 Point
             :
        d = p1.Dist(p2)
```

METODI

DEFINIZIONE

func (RECEIVER) NOME (PAR. FORMALI) REST {

}

INVOCAZIONE

RECEIVER . NOME (PAR. ATTUALI)

tipo Point

New Point(x, y float64) Point

(p1 Point) Dist(p2 Point) float64

(p1 Point) Median(p2 Point) Point

(p1 Point) String() string

tipo Line (RETTE $y = mx + q$)

NewLine (m, q float64) Line

(r Line) Dist(p Point) float64

(r1 Line) IsParallel (r2 Line) bool

(r Line) Belongs (p Point) bool

(r1 Line) Intersection (r2 Line) (Point, ok)

(r Line) String() string

$$\begin{cases} y = m_1 x + q_1 \\ y = m_2 x + q_2 \end{cases}$$

$$m_1 x + q_1 = m_2 x + q_2$$

$$(m_1 - m_2) x = q_2 - q_1$$

$$x = \frac{q_2 - q_1}{m_1 - m_2}$$

$$y = m_1 \frac{q_2 - q_1}{m_1 - m_2} + q_1$$

```
type   HasDistance   interface {
        Dist(p  Point) float64

}

type   HasDistanceAndBelongs   interface{

        Dist(p  Point) float64
        Belongs (p  Point)  bool

}

type   x     interface {
}
```

Any