

SVGo Examples

```
package main
import (
    "os"

    "github.com/ajstarks/svgo"
)

var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
)

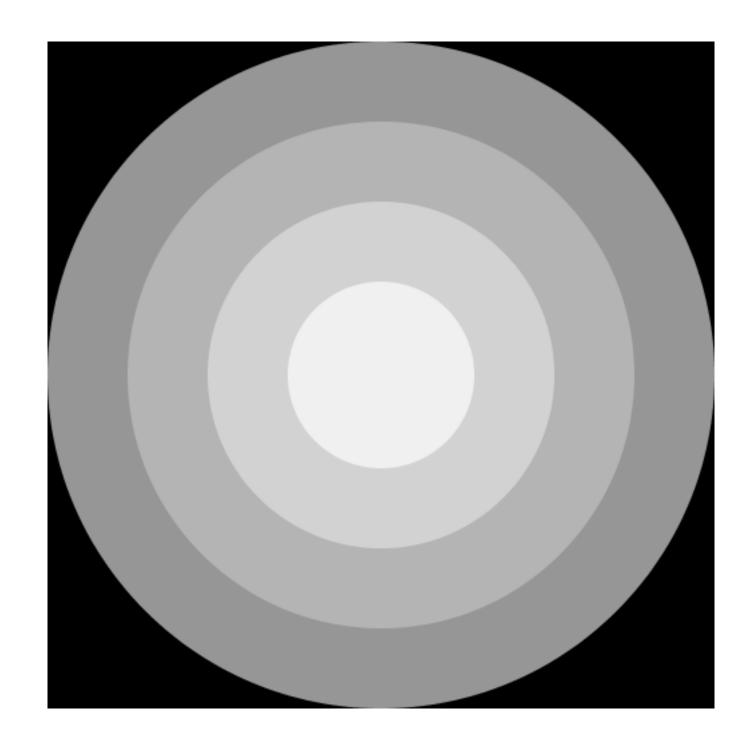
func main() {
    style := "fill:white;font-size:48pt;text-anchor:middle"
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height)
    canvas.Circle(width/2, height, width/2, "fill:rgb(44, 77, 232)")
    canvas.Text(width/2, height/3, "hello, world", style)
    canvas.End()
}
```



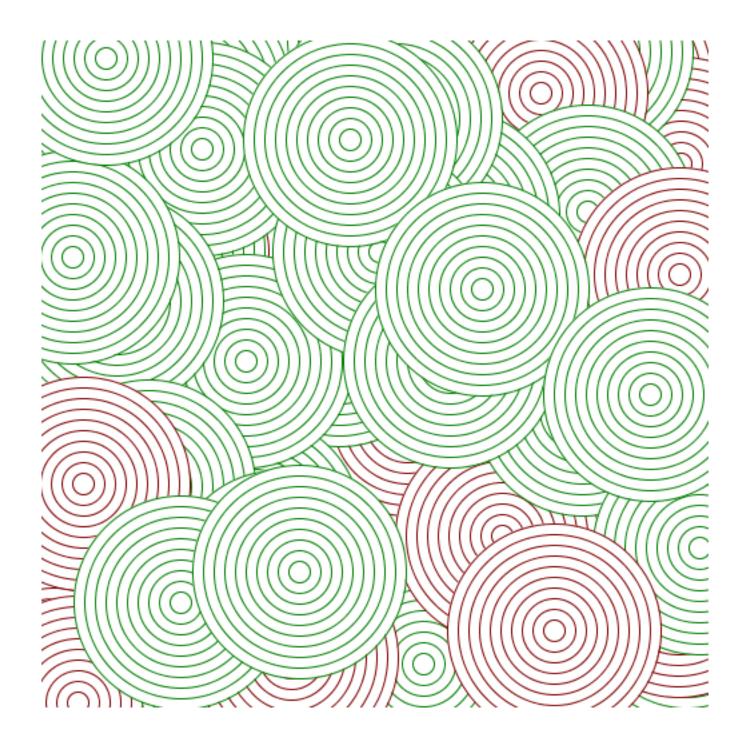
```
package main
import (
    "crypto/md5"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func colorhash(s string) (int, int, int) {
    hash := md5.New()
    hash.Write([]byte(s))
    v := hash.Sum(nil)
    return int(v[0]), int(v[1]), int(v[2])
func main() {
    name := "SVGo"
    style := "fill:white;text-anchor:middle;font-size:72pt"
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height, canvas.RGB(colorhash(name)))
    canvas.Text(width/2, height/2, name, style)
    canvas.End()
```



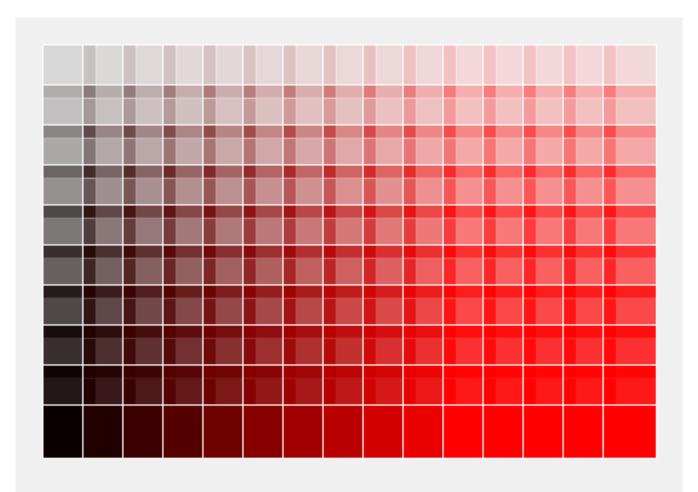
```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height)
    r := height / 2
    for g := 150; g < 255; g += 30 {
        canvas.Circle(width/2, width/2, r, canvas.RGB(g, g, g))
        r -= 60
    canvas.End()
```



```
package main
import (
    "math/rand"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    canvas.Start(width, height)
    canvas.Gstyle("fill:white")
    var color string
    radius := 80
    step := 8
    for i := 0; i < 200; i++ {
        if i%4 == 0 {
            color = "rgb(127,0,0)"
        } else {
            color = "rgb(0,127,0)"
        }
        x, y := rand.Intn(width), rand.Intn(height)
        for r, nc := radius, 0; nc < 10; nc++ {
            canvas.Circle(x, y, r, "stroke:"+color)
            r -= step
    canvas.Gend()
    canvas.End()
```

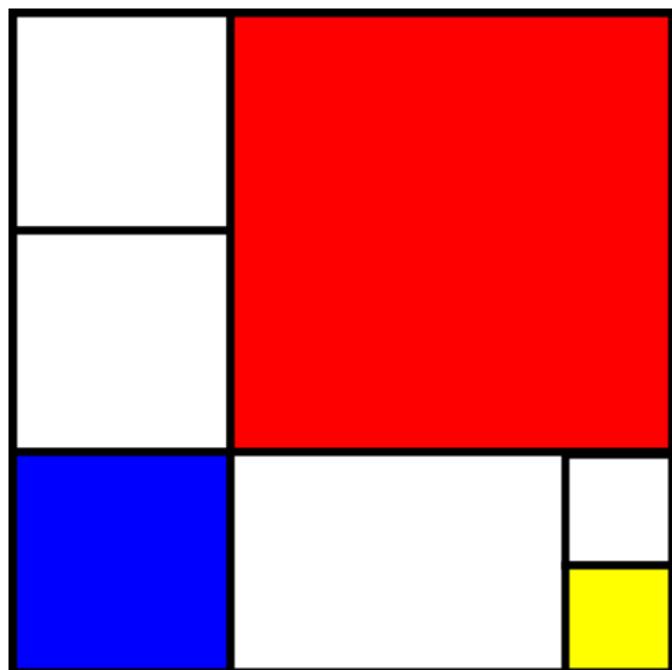


```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
   y := 20
    v := 10
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height, "fill:rgb(240,240,240)")
    canvas.Gstyle("stroke:white")
    for x := 20; x < 450; x += 30 {
        op := 0.1
        for i := 0; i < 100; i += 10 {
            canvas.Square(x, y, 20*2, canvas.RGBA(v, 0, 0, op))
            y += 30
            op += 0.1
        }
        y = 20
        v += 25
    canvas.Gend()
    canvas.End()
```

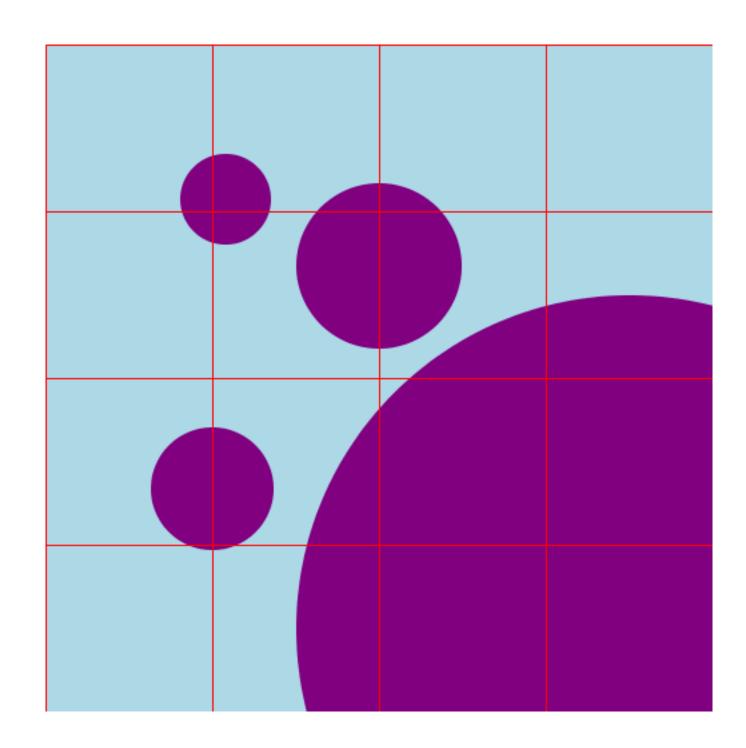


[5]

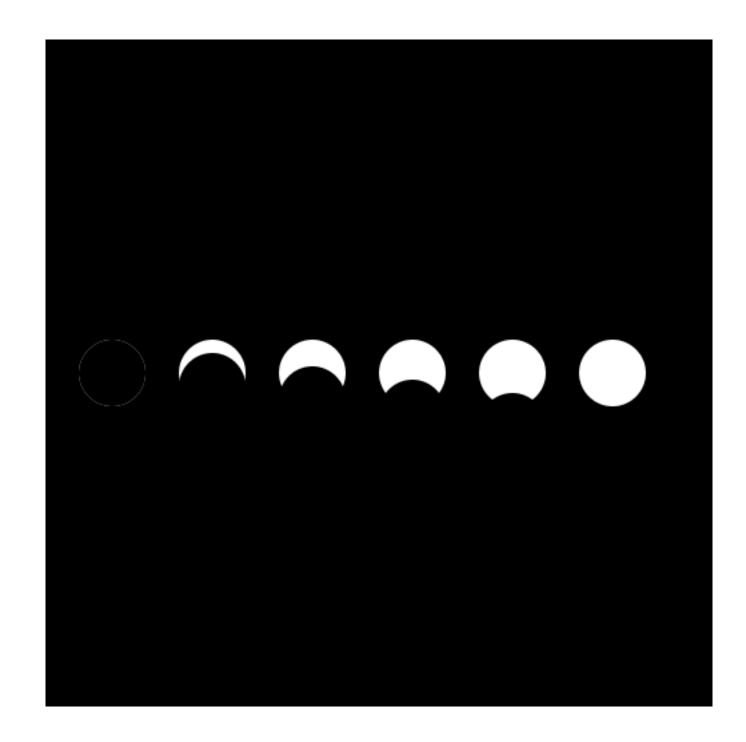
```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    w3 := width / 3
    w6 := w3 / 2
    w23 := w3 * 2
    canvas.Start(width, height)
    canvas.Gstyle("stroke:black;stroke-width:6")
    canvas.Rect(0, 0, w3, w3, "fill:white")
    canvas.Rect(0, w3, w3, w3, "fill:white")
    canvas.Rect(0, w23, w3, w3, "fill:blue")
    canvas.Rect(w3, 0, w23, w23, "fill:red")
    canvas.Rect(w3, w23, w23, w3, "fill:white")
    canvas.Rect(width-w6, height-w3, w3-w6, w6, "fill:white")
    canvas.Rect(width-w6, height-w6, w3-w6, w6, "fill:yellow")
    canvas.Gend()
    canvas.Rect(0, 0, width, height, "fill:none;stroke:black;stroke-width:12")
    canvas.End()
```



```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func dot(x, y, d int) {
    canvas.Circle(x, y, d/2, "fill:rgb(128,0,128)")
}
// Composition from "Design for Hackers, pg. 129
func main() {
    d1 := height
    d2 := d1 / 4
    d3 := (d2 * 3) / 4
    d4 := (d3 * 3) / 4
    coffset := height / 8
    hoffset := height / (height / 10)
    voffset := -width / 10
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height, "fill:lightblue")
    dot(width-coffset, height-coffset, d1)
    dot(width/2, height/3, d2)
    dot(width/4, height*2/3, d3)
    dot(width/4+hoffset, height/3+voffset, d4)
    canvas.Grid(0, 0, width, height, width/4, "stroke:red")
    canvas.End()
```



```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    h2 := height / 2
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height)
    for x, y := 50, h2; x < 450; x += 75 {
        canvas.Ellipse(x, h2, 25, 25, "fill:white")
        canvas.Ellipse(x, y, 25, 25, "fill:black")
        y += 10
    canvas.End()
```



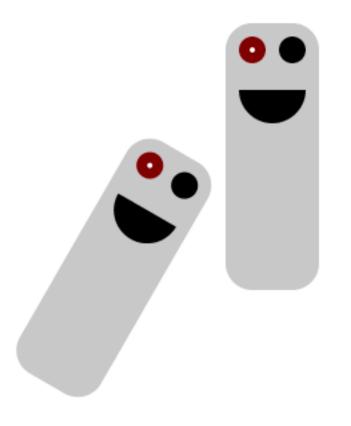
```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func cloud(x, y, r int, style string) {
    small := r / 2
    medium := (r * 6) / 10
    canvas.Gstyle(style)
    canvas.Circle(x, y, r)
    canvas.Circle(x+r, y+small, small)
    canvas.Circle(x-r-small, y+small, small)
    canvas.Circle(x-r, y, medium)
    canvas.Rect(x-r-small, y, r*2+small, r)
    canvas.Gend()
}
func main() {
    canvas.Start(width, height)
    cloud(width/2, height/2, 100, canvas.RGB(127, 127, 127))
    canvas.End()
}
```

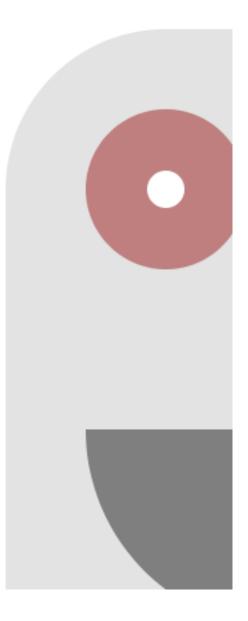


```
package main
import (
    "math/rand"
    "os"
    "time"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func cloud(x, y, r int, style string) {
    small := r / 2
    medium := (r * 6) / 10
    canvas.Gstyle(style)
    canvas.Circle(x, y, r)
    canvas.Circle(x+r, y+small, small)
    canvas.Circle(x-r-small, y+small, small)
    canvas.Circle(x-r, y, medium)
    canvas.Rect(x-r-small, y, r*2+small, r)
    canvas.Gend()
func main() {
    rand.Seed(time.Now().Unix())
    canvas.Start(width, height)
    for i := 0; i < 50; i++ \{
        red := rand.Intn(255)
        green := rand.Intn(255)
        blue := rand.Intn(255)
        size := rand.Intn(60)
        x := rand.Intn(width)
        y := rand.Intn(height)
        cloud(x, y, size, canvas.RGB(red, green, blue))
    canvas.End()
```

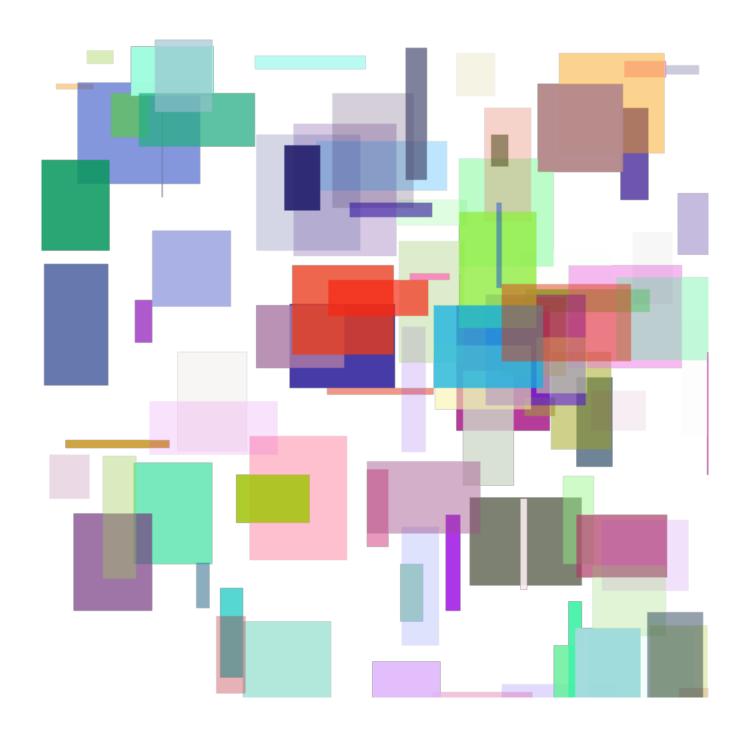


```
package main
import (
    "github.com/ajstarks/svgo"
    "os"
var canvas = svg.New(os.Stdout)
func smile(x, y, r int) {
    r2 := r * 2
    r3 := r * 3
    r4 := r * 4
    rq := r / 4
    gray := canvas.RGB(200, 200, 200)
    red := canvas.RGB(127, 0, 0)
    canvas.Roundrect(x-r2, y-r2, r*7, r*20, r2, r2, gray)
    canvas.Circle(x, y, r, red)
    canvas.Circle(x, y, rq, "fill:white")
    canvas.Circle(x+r3, y, r)
    canvas.Arc(x-r, y+r3, rq, rq, 0, true, false, x+r4, y+r3)
}
func main() {
    canvas.Start(500, 500)
    canvas.Rect(0, 0, 500, 500, "fill:white")
    smile(200, 100, 10)
    canvas.Gtransform("rotate(30)")
    smile(200, 100, 10)
    canvas.Gend()
    canvas.Gtransform("translate(50,0) scale(2,2)")
    canvas.Gstyle("opacity:0.5")
    smile(200, 100, 30)
    canvas.Gend()
    canvas.Gend()
    canvas.End()
}
```





```
package main
import (
    "math/rand"
    "os"
    "time"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    canvas.Start(width, height)
    rand.Seed(time.Now().Unix())
    for i := 0; i < 100; i++ \{
        fill := canvas.RGBA(
            rand.Intn(255),
            rand.Intn(255),
            rand.Intn(255),
            rand.Float64())
        canvas.Rect(
            rand.Intn(width),
            rand.Intn(height),
            rand.Intn(100),
            rand.Intn(100),
            fill)
    canvas.End()
}
```

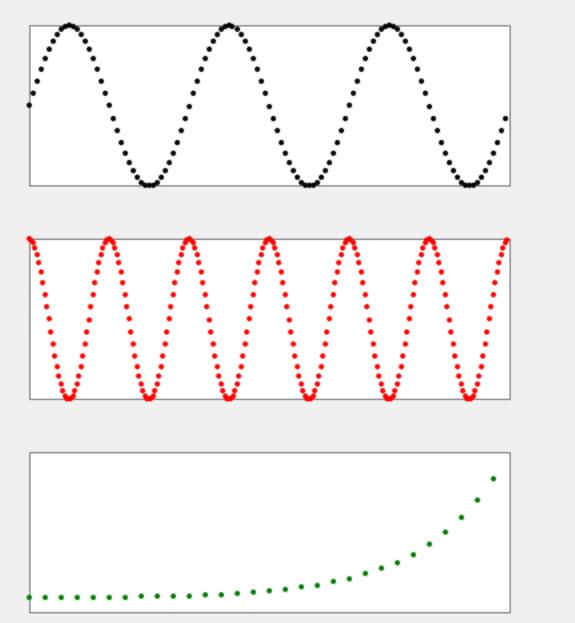


```
package main
import (
    "math/rand"
    "os"
    "time"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    canvas.Start(width, height)
    rand.Seed(time.Now().Unix())
    for i := 0; i < 100; i++ \{
        fill := canvas.RGBA(
            rand.Intn(255),
            rand.Intn(255),
            rand.Intn(255),
            rand.Float64())
        canvas.Ellipse(
            rand.Intn(width),
            rand.Intn(height),
            rand.Intn(100),
            rand.Intn(100),
            fill)
    canvas.End()
```



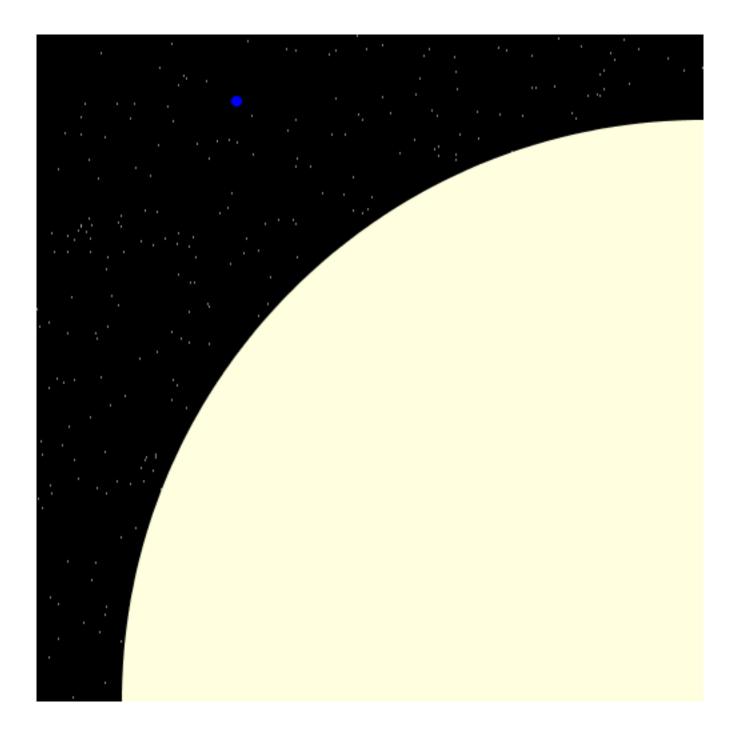
```
package main
import (
    "fmt"
    "math/rand"
    "os"
    "time"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func randarc(aw, ah, sw int, f1, f2 bool) {
    colors := []string{"red", "green", "blue", "gray"}
    afmt := "stroke:%s;stroke-opacity:%.2f;stroke-width:%dpx;fill:none"
    begin, arclength := rand.Intn(aw), rand.Intn(aw)
    end := begin + arclength
    baseline := ah / 2
    al, cl := arclength/2, len(colors)
    canvas.Arc(begin, baseline, al, al, 0, f1, f2, end, baseline,
        fmt.Sprintf(afmt, colors[rand.Intn(cl)], rand.Float64(), rand.Intn(sw)))
}
func main() {
    rand.Seed(time.Now().Unix())
    canvas.Start(width, height)
    aw := width / 2
    maxstroke := height / 10
    for i := 0; i < 20; i++ \{
        randarc(aw, height, maxstroke, false, true)
        randarc(aw, height, maxstroke, false, false)
    }
    canvas.End()
```

```
package main
import (
    "math"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func vmap(value float64, l1 float64, h1 float64,
        l2 float64, h2 float64) float64 {
    return l2 + (h2-l2)*(value-l1)/(h1-l1)
}
func plotfunc(left, top, w, h int, min, max, fmin, fmax,
        interval float64, f func(float64) float64, style ...string) {
    canvas.Translate(0, top)
    canvas.Rect(left, 0, w, h, "fill:white;stroke:gray")
    for x := min; x < max; x += interval {
        dx := int(vmap(x, min, max, float64(left), float64(w+left)))
        dy := int(vmap(f(x), fmin, fmax, 0, float64(h)))
        canvas.Translate(0, (h - height))
        canvas.Circle(dx, height-dy, 2, style...)
        canvas.Gend()
    }
    canvas.Gend()
func main() {
    const TwoPi = 2 * math.Pi
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height, "fill:rgb(240,240,240)")
    plotfunc(80, 20, 360, 120, 0, 3*TwoPi, -1, 1, math.Pi/20, math.Sin)
    plotfunc(80, 180, 360, 120, 0, 6*TwoPi, -1, 1, math.Pi/20, math.Cos, "fill:red")
    plotfunc(80, 340, 360, 120, -3, 3, -2, 20, 0.2, math.Exp, "fill:green")
    canvas.End()
```



```
package main
import (
    "fmt"
                                                                               Cost
                                                                                                           166
    "math/rand"
    "0S"
    "time"
                                                                             Timing
    "github.com/ajstarks/svgo"
                                                                           Sourcing
                                                                                                                206
var (
    canvas = svg.New(os.Stdout)
    width = 500
                                                                        Technology
    height = 500
                                                                                                                        277
func meter(x, y, w, h, value int, label string) {
    corner := h / 2
    inset := corner / 2
    canvas.Text(x-10, y+h/2, label, "text-anchor:end;baseline-shift:-33%")
    canvas.Roundrect(x, y, w, h, corner, corner, "fill:rgb(240,240,240)")
    canvas.Roundrect(x+corner, y+inset, value, h-(inset*2), inset, inset, "fill:darkgray")
    canvas.Circle(x+inset+value, y+corner, inset, "fill:red;fill-opacity:0.3")
    canvas.Text(x+inset+value+inset+2, y+h/2, fmt.Sprintf("%-3d", value), "font-size:75%;text-anchor:start;baseline-shift:-33%")
}
func main() {
    rand.Seed(time.Now().Unix())
    items := []string{"Cost", "Timing", "Sourcing", "Technology"}
    mh, gutter := 50, 20
    x, y := 100, 50
    canvas.Start(width, height)
    canvas.Gstyle("font-family:sans-serif;font-size:12pt")
    for , data := range items {
        meter(x, y, width-100, mh, rand.Intn(300), data)
        y += mh + gutter
    canvas.Gend()
    canvas.End()
```

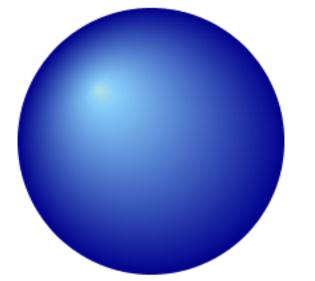
```
package main
import (
    "math/rand"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height, "fill:black")
    for i := 0; i < width; i++ {
       x := rand.Intn(width)
       y := rand.Intn(height)
        canvas.Line(x, y, x, y+1, "stroke:white")
    }
    earth := 4
    sun := earth * 109
    canvas.Circle(150, 50, earth, "fill:blue")
                                                          // earth
    canvas.Circle(width, height, sun, "fill:lightyellow") // sun
    canvas.End()
```



```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func male(x, y, w int) {
    canvas.Ellipse(x, y, w, w/2, "fill:blue")
    canvas.Bezier(
        x-(w*8), y,
        x - (w*4), y - (w*4),
        x - (w*4), y+w,
        x-w, y, "stroke:blue;fill:none")
func female(x, y, w int) {
    canvas.Circle(x, y, w, "fill:pink")
}
func main() {
    msize := 5
    fsize := msize * 40
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height, "fill:white")
    female(width, height-50, fsize)
    male(100, 200, msize)
    canvas.End()
```

```
package main
import (
    "math/rand"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func male(x, y, w int) {
    canvas.Ellipse(x, y, w, w/2, "fill:blue")
    canvas.Bezier(
        x - (w*8), y,
        x-(w*4), y-(w*4),
        x - (w*4), y+w,
        x-w, y, "stroke:blue;fill:none")
}
func female(x, y, w int) {
    canvas.Circle(x, y, w, "fill:pink")
}
func main() {
    msize := 5
    fsize := msize * 40
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height, "fill:white")
    female(width, height-50, fsize)
    for i := 0; i < 100; i++ \{
        canvas.TranslateRotate(rand.Intn(300)+100, rand.Intn(200)+200, rand.Float64()*45)
        male(0, 0, msize)
        canvas.Gend()
    canvas.End()
```

```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    rg := []svg.Offcolor{
        {1, "powderblue", 1},
        {10, "lightskyblue", 1},
        {100, "darkblue", 1},
    lg := []svg.Offcolor{
        {10, "black", 1},
        {20, "gray", 1},
        {100, "lightgray", 1},
    canvas.Start(width, height)
    canvas.Def()
    canvas.RadialGradient("rg", 50, 50, 50, 30, 30, rg)
    canvas.LinearGradient("lg", 0, 100, 0, 0, lg)
    canvas.DefEnd()
    canvas.Circle(width/2, height-300, 100, "fill:url(#rg)")
    canvas.Ellipse(width-110, height-50, 100, 20, "fill:url(#lg)")
    canvas.End()
}
```





```
package main
import (
    "fmt"
    "0S"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    canvas.Start(width, height)
    opacity := 1.0
    for x := 0; x < width; x += 100 {
        canvas.Image(x, 100, 128, 128, "gophercolor128x128.png", fmt.Sprintf("opacity:%.2f", opacity))
        opacity -= 0.2
    canvas.End()
```

D

```
package main
import (
    "fmt"
    "0S"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    fonts := []string{
        "Helvetica", "Times", "Courier",
        "sans-serif", "serif", "monospace",
    sizes := []int\{10, 12, 16, 21, 24, 36, 48\}
    largest := sizes[len(sizes)-1]
    gutter := largest + (largest / 3)
    margin := gutter * 2
    y := 100
    canvas.Start(width, height)
    for , f := range fonts {
       x := margin
        canvas.Gstyle("font-family:" + f)
        canvas.Text(x-10, y, f, "text-anchor:end")
       for _, s := range sizes {
            canvas.Text(x, y, fmt.Sprintf("%d", s), fmt.Sprintf("font-size:%dpt", s))
            x += s * 2
        }
        canvas.Gend()
        y += gutter
    canvas.End()
```

```
Helvetica 10 12 16 21 24 36 48

Times 10 12 16 21 24 36 48

Courier 10 12 16 21 24 36 48

sans-serif 10 12 16 21 24 36 48

serif 10 12 16 21 24 36 48

mono space 10 12 16 21 24 36 48
```

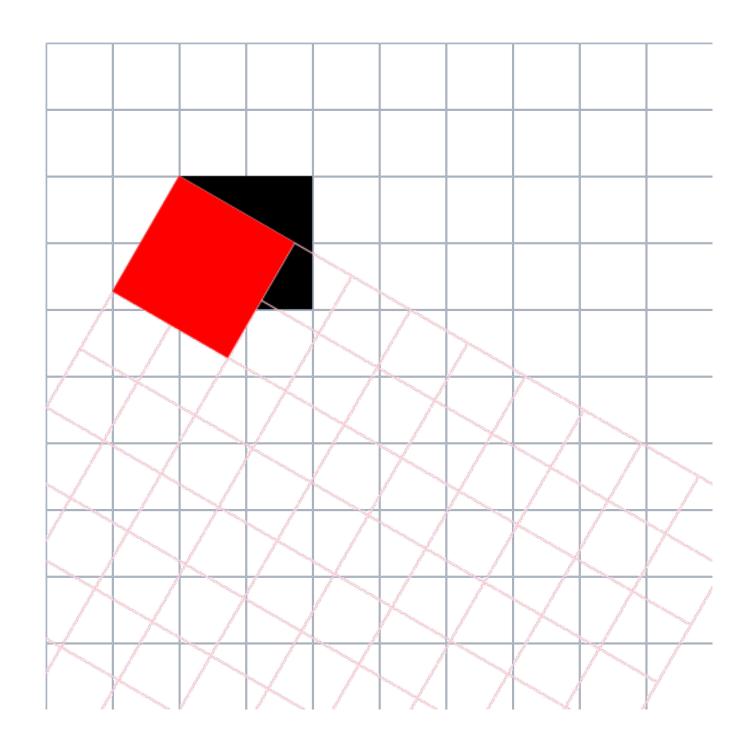
```
package main
import (
    "0S"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    lorem := []string{
        "Lorem ipsum dolor sit amet, consectetur adipiscing",
        "elit, sed do eiusmod tempor incididunt ut labore et",
        "dolore magna aliqua. Ut enim ad minim veniam, quis",
        "nostrud exercitation ullamco laboris nisi ut aliquip",
        "ex ea commodo consequat. Duis aute irure dolor in",
        "reprehenderit in voluptate velit esse cillum dolore eu",
        "fugiat nulla pariatur. Excepteur sint occaecat cupidatat",
        "non proident, sunt in culpa qui officia deserunt mollit",
    fontlist := []string{"Georgia", "Helvetica", "Gill Sans"}
    size, leading := 14, 16
    x, y := 50, 20
    tsize := len(lorem)*leading + size*3
    canvas.Start(width, height)
    for _, f := range fontlist {
        canvas.Gstyle("font-family:" + f)
        canvas.Textlines(x, y, lorem, size, leading, "black", "start")
        canvas.Text(x, size+y+tsize/2, f, "fill-opacity:0.3;fill:red;font-size:750%")
        canvas.Gend()
        y += tsize
    }
    canvas.End()
```

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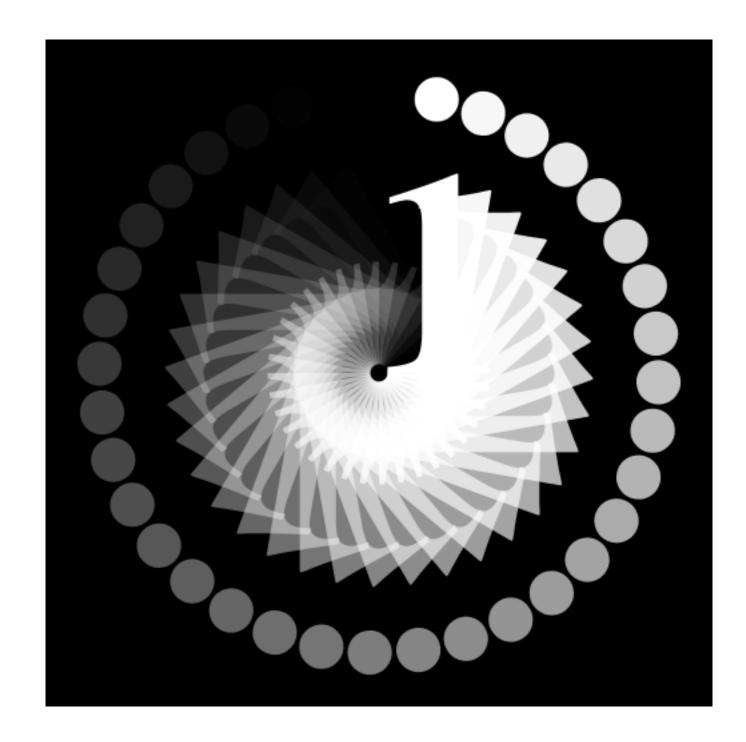
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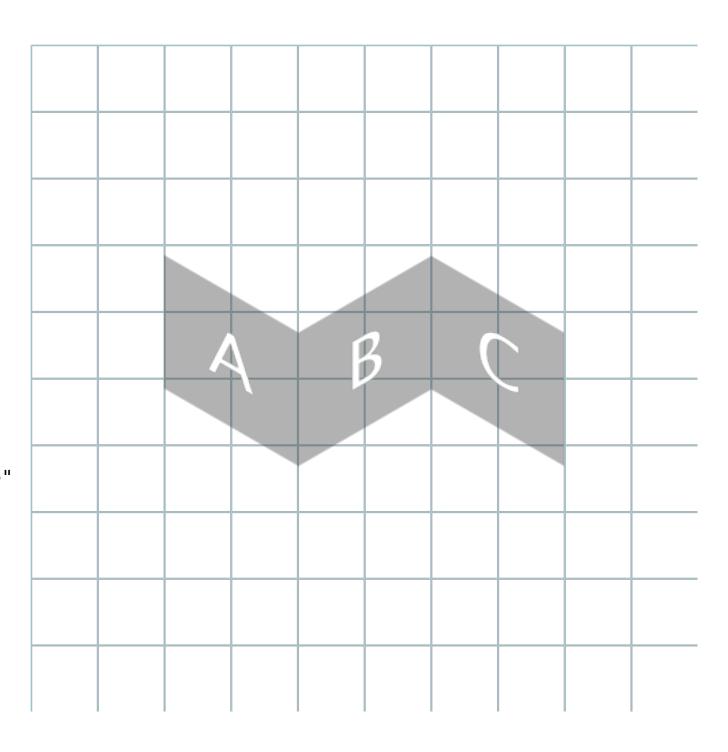
```
package main
import (
    "github.com/ajstarks/svgo"
    "os"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func tro() {
    canvas.Rect(100, 100, 100, 100)
    canvas.TranslateRotate(100, 100, 30)
    canvas.Grid(0, 0, width, height, 50, "stroke:pink")
    canvas.Rect(0, 0, 100, 100, "fill:red")
    canvas.Gend()
}
func main() {
    canvas.Start(width, height)
    canvas.Grid(0, 0, width, height, 50, "stroke:lightsteelblue")
    tro()
    canvas.End()
```



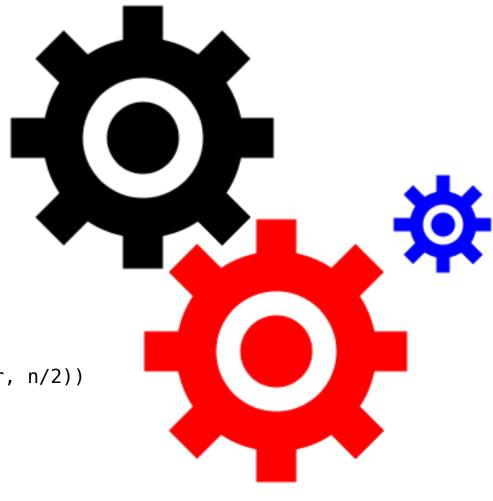
```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    a := 1.0
    ai := 0.03
    ti := 10.0
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height)
    canvas.Gstyle("font-family:serif;font-size:244pt")
    for t := 0.0; t <= 360.0; t += ti {
        canvas.TranslateRotate(width/2, height/2, t)
        canvas.Text(0, 0, "i", canvas.RGBA(255, 255, 255, a))
        canvas.Gend()
        a -= ai
    }
    canvas.Gend()
    canvas.End()
```



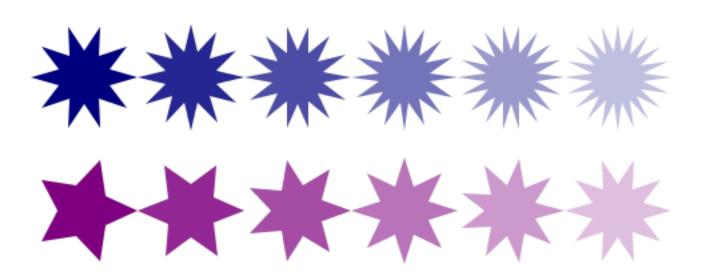
```
package main
import (
    "fmt"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func sky(x, y, w, h, a int, s string) {
    tfmt := "font-family:sans-serif;font-size:%dpx;text-anchor:middle"
    canvas.Gstyle(fmt.Sprintf(tfmt, w/2))
    canvas.SkewXY(0, float64(a))
    canvas.Rect(x, y, w, h, "fill:black;fill-opacity:0.3")
    canvas.Text(x+w/2, y+h/2, s, "fill:white;baseline-shift:-33%")
    canvas.Gend()
    canvas.Gend()
func main() {
    canvas.Start(width, height)
    canvas.Grid(0, 0, width, height, 50, "stroke:lightblue")
    sky(100, 100, 100, 100, 30, "A")
    sky(200, 332, 100, 100, -30, "B")
    sky(300, -15, 100, 100, 30, "C")
    canvas.End()
```



```
package main
import (
    "fmt"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func gear(x, y, w, h, n, l, m int, color string) {
    canvas.Gstyle(fmt.Sprintf("fill:none;stroke:%s;stroke-width:%d", color, n/2))
    canvas.Circle(x+w/2, y+h/2, n)
    canvas.Circle(x+w/2, y+h/2, n/5, "fill:"+color)
    ai := 360 / float64(m)
    for a := 0.0; a <= 360.0; a += ai {
        canvas.TranslateRotate(x+w/2, y+h/2, a)
        canvas.Line(n-l, n-l, n+l, n+l)
        canvas.Gend()
    }
    canvas.Gend()
}
func main() {
    canvas.Start(width, height)
    gear(0, 0, 250, 250, 60, 10, 8, "black")
    gear(100, 160, 250, 250, 60, 10, 8, "red")
    gear(300, 140, 100, 100, 20, 6, 8, "blue")
    canvas.End()
}
```



```
package main
import (
    "github.com/ajstarks/svgo"
    "math"
    "0S"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
// See: http://vormplus.be/blog/article/processing-month-day-4-stars
func star(xp, yp, n int, inner, outer float64, style string) {
    xv, yv := make([]int, n*2), make([]int, n*2)
    angle := math.Pi / float64(n)
    for i := 0; i < n*2; i++ \{
        fi := float64(i)
        if i%2 == 0 {
            xv[i] = int(math.Cos(angle*fi) * outer)
            yv[i] = int(math.Sin(angle*fi) * outer)
        } else {
            xv[i] = int(math.Cos(angle*fi) * inner)
            yv[i] = int(math.Sin(angle*fi) * inner)
        }
    }
    canvas.Translate(xp, yp)
    canvas.Polygon(xv, yv, style)
    canvas.Gend()
}
func main() {
    canvas.Start(width, height)
    for x, op, i := 50, 1.0, 5; i \le 10; i++ \{
        star(x, 200, i*2, 20, 40, canvas.RGBA(0, 0, 127, op))
        star(x, 300, i, 20, 40, canvas.RGBA(127, 0, 127, op))
        x += 80
        op -= 0.15
    canvas.End()
```



```
package main
import (
    "fmt"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func coord(x, y, size int, label string) {
    tstyle := "text-anchor:middle:font-size:12pt"
    offset := size + (size / 2)
    canvas.Text(x, y-offset, fmt.Sprintf("%s (%d,%d)", label, x, y), tstyle)
    canvas.Circle(x, y, size)
}
func showcurve(bx, by, cx, cy, ex, ey int) {
    dotsize := 5
    sw := dotsize * 2
    cfmt := "stroke:%s;stroke-width:%d;fill:none;stroke-opacity:%.2f"
    style := fmt.Sprintf(cfmt, "red", sw, 0.2)
    coord(bx, by, dotsize, "begin")
    coord(ex, ey, dotsize, "end")
    coord(cx, cy, dotsize, "control")
    canvas.Qbez(bx, by, cx, cy, ex, ey, style)
}
func main() {
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height, "fill:rgb(250,250,250)")
    canvas.Grid(0, 0, width, height, 25, "stroke:lightgray")
    showcurve(70, 200, 100, 425, 425, 125)
    canvas.End()
}
```



begin (70,200)

control (100,425)

end (425, 125)

```
package main
import (
    "fmt"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func coord(x, y, size int) {
    offset := size * 2
    canvas.Text(x, y-offset, fmt.Sprintf("(%d,%d)", x, y),
        "font-size:50%; text-anchor:middle")
    canvas.Circle(x, y, size, "fill-opacity:0.3")
}
func makepath(x, y, sx, sy, cx, cy, ex, ey int, id, text string) {
    canvas.Def()
    canvas.Qbez(sx, sy, cx, cy, ex, ey, `id="`+id+`"`)
    canvas.DefEnd()
    canvas.Translate(x, y)
    canvas.Textpath(text, "#"+id)
    coord(sx, sy, 5)
    coord(ex, ey, 5)
    coord(cx, cy, 5)
    canvas.Gend()
}
func main() {
    message := `It's fine & "dandy" to have text on a path`
    canvas.Start(width, height)
    canvas.Gstyle("font-family:serif;font-size:21pt")
    makepath(0, 0, 70, 200, 100, 425, 425, 125, "tpath", message)
    canvas.Gend()
    canvas.End()
}
```

(425,12 (425,12 on a path of "dandy" to have text on a path (70,200)

(100,425)

(425,125)