

cgrid.go

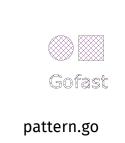
d4h.go



therm.go

sunearth.go

diag.go



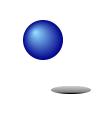
conception.go

mondrian.go



richter.go

conception2.go

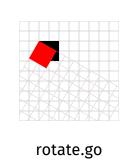






uni.go











gear.go

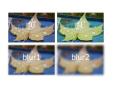


star.go

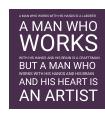
gradient.go fontrange.go







fe.go











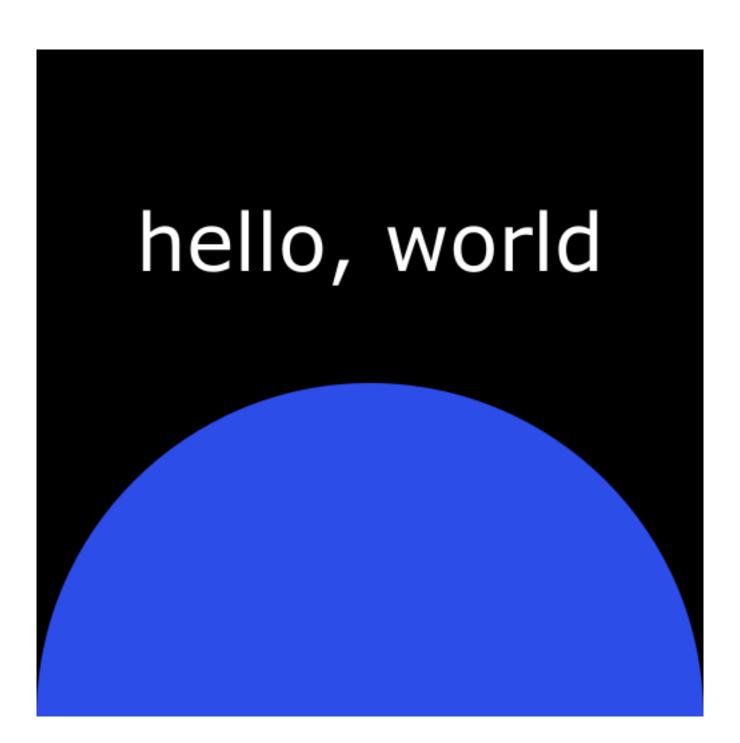
```
package main

import (
    "os"

    "github.com/ajstarks/svgo"
)

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

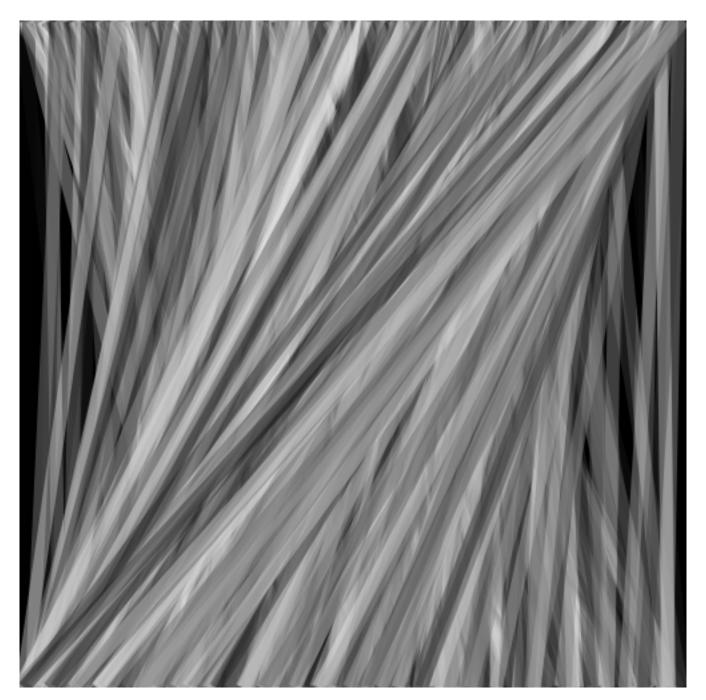
func main() {
    style := "fill:white;font-size:48pt;text-anchor:middle"
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height)
    canvas.Circle(width/2, height, width/2, "fill:rgb(44, 77, 232)")
    canvas.Text(width/2, height/3, "hello, world", style)
    canvas.End()
}
```



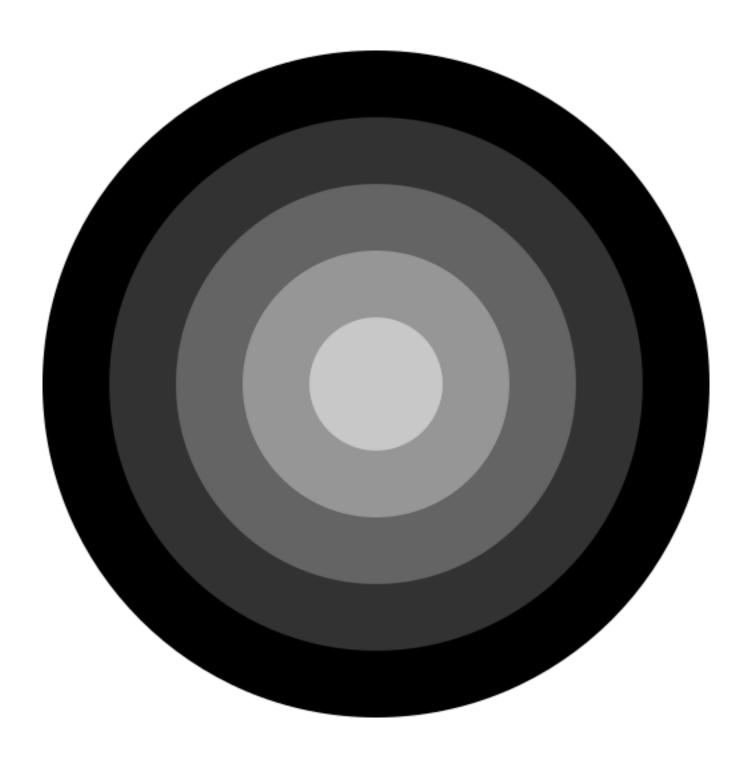
```
package main
import (
    "crypto/md5"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func colorhash(s string) (int, int, int) {
    hash := md5.New()
    hash.Write([]byte(s))
    v := hash.Sum(nil)
    return int(v[0]), int(v[1]), 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()
```



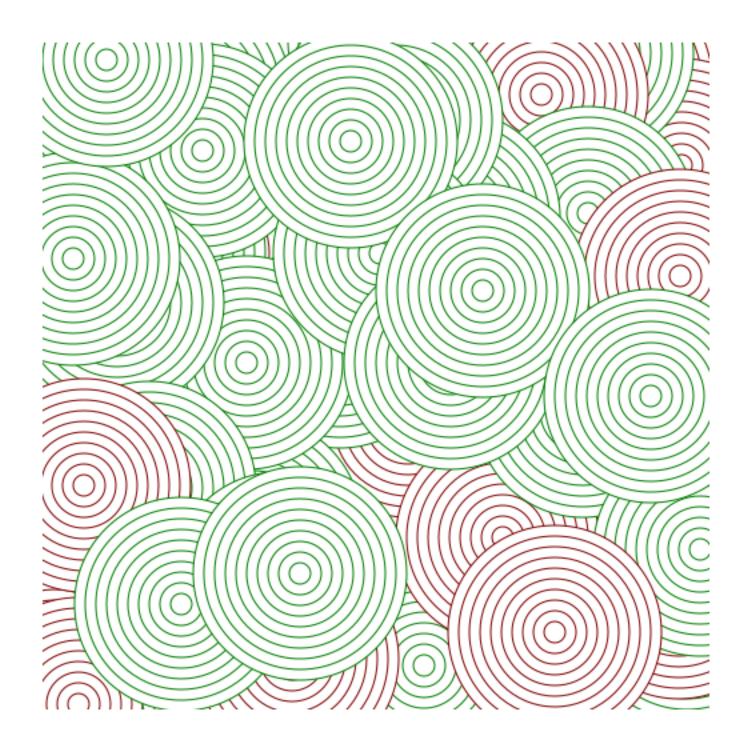
```
package main
import (
    "fmt"
    "math/rand"
    "os"
    "time"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    rand.Seed(time.Now().Unix())
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height)
    canvas.Gstyle("stroke-width:10")
    for i := 0; i < width; i++ {
        r := rand.Intn(255)
        canvas.Line(i, 0, rand.Intn(width), height,
            fmt.Sprintf("stroke:rgb(%d,%d,%d); opacity:0.39", r, r, r))
    canvas.Gend()
    canvas.End()
```



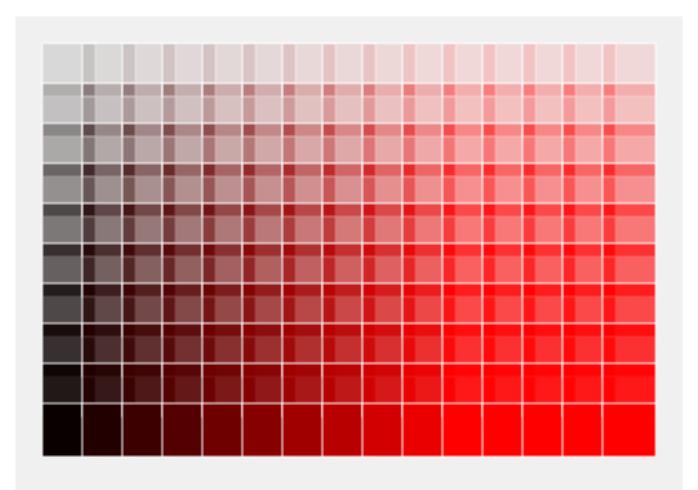
```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height, "fill:white")
    r := height / 2
    for g := 0; g < 250; g += 50 {
        canvas.Circle(width/2, width/2, r, canvas.RGB(g, g, g))
        r -= 50
    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()
```

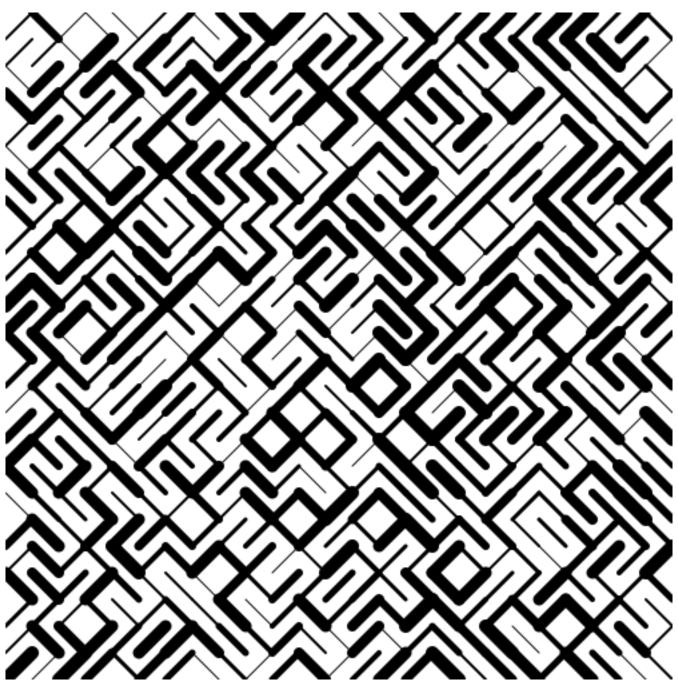


```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
   y := 20
    v := 10
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height, "fill:rgb(240,240,240)")
    canvas.Gstyle("stroke:white")
    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()
```

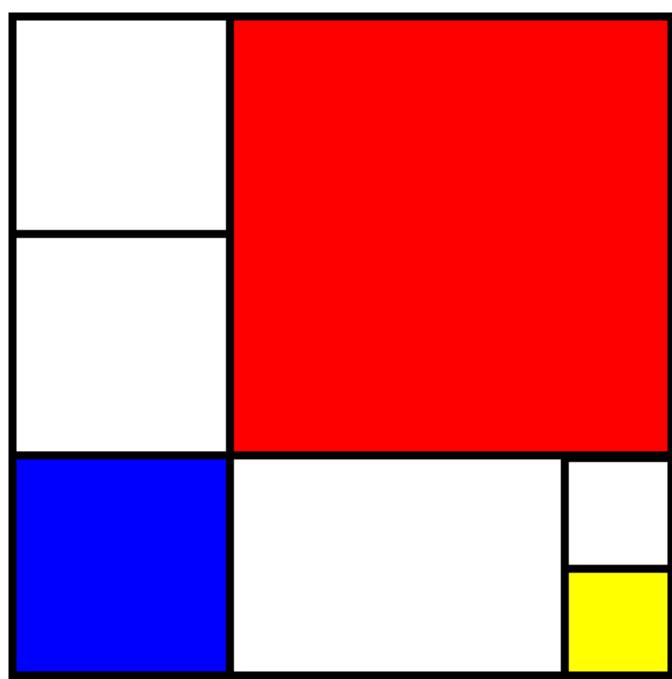


[6]

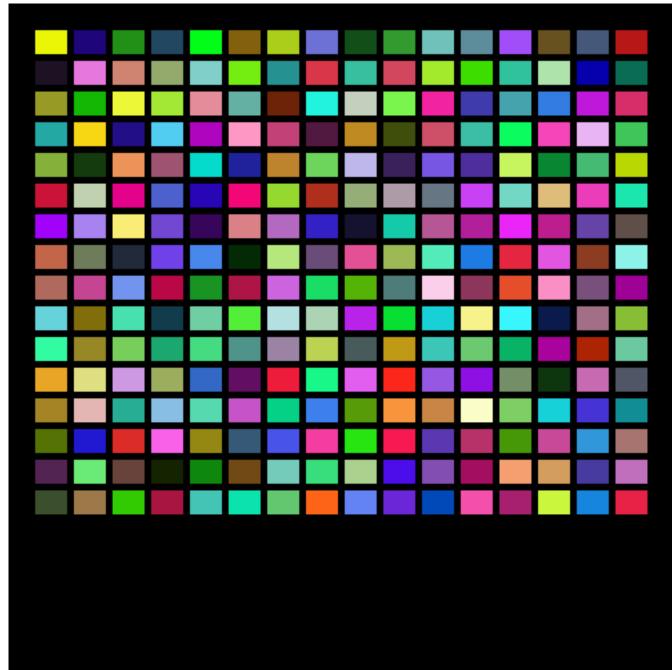
```
package main
import (
    "fmt"
    "math/rand"
    "os"
    "time"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    tiles, maxstroke := 25, 10
    rand.Seed(time.Now().Unix())
    canvas.Start(width, height)
    linecaps := []string{"butt", "round", "square"}
    strokefmt := "stroke-width:%d"
    lcfmt := "stroke:black;stroke-linecap:%s"
    canvas.Gstyle(fmt.Sprintf(lcfmt, linecaps[rand.Intn(3)]))
    var sw string
    for y := 0; y < tiles; y++ {
        for x := 0; x < tiles; x++ {
            px := width / tiles * x
            py := height / tiles * y
            if rand.Intn(100) > 50 {
                sw = fmt.Sprintf(strokefmt, rand.Intn(maxstroke)+1)
                canvas.Line(px, py, px+width/tiles, py+height/tiles, sw)
            } else {
                sw = fmt.Sprintf(strokefmt, rand.Intn(maxstroke)+1)
                canvas.Line(px, py+height/tiles, px+width/tiles, py, sw)
            }
    canvas.Gend()
    canvas.End()
```



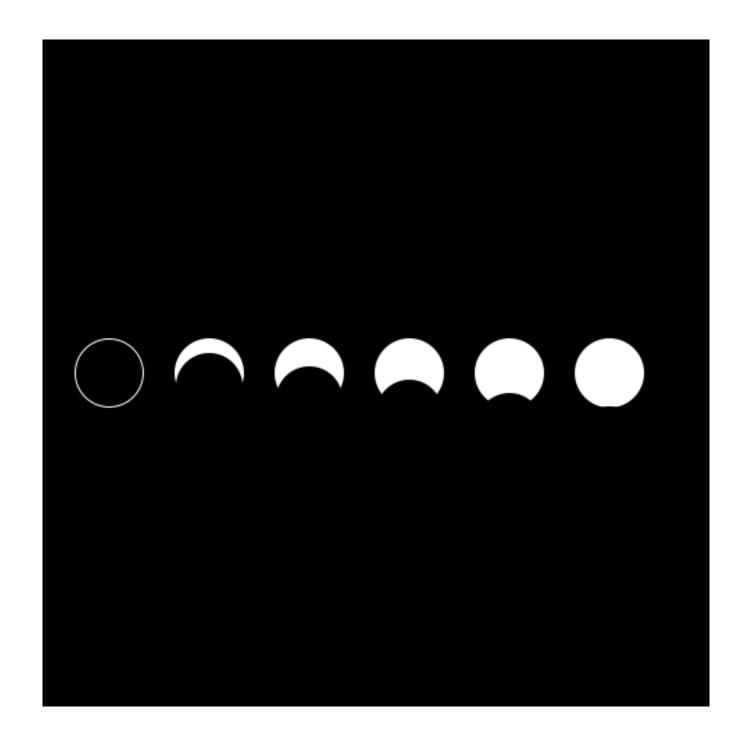
```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
// Piet Mondrian - Composition in Red, Blue, and Yellow
func main() {
    w3 := width / 3
    w6 := w3 / 2
    w23 := w3 * 2
    canvas.Start(width, height)
    canvas.Gstyle("stroke:black;stroke-width:6")
    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()
```



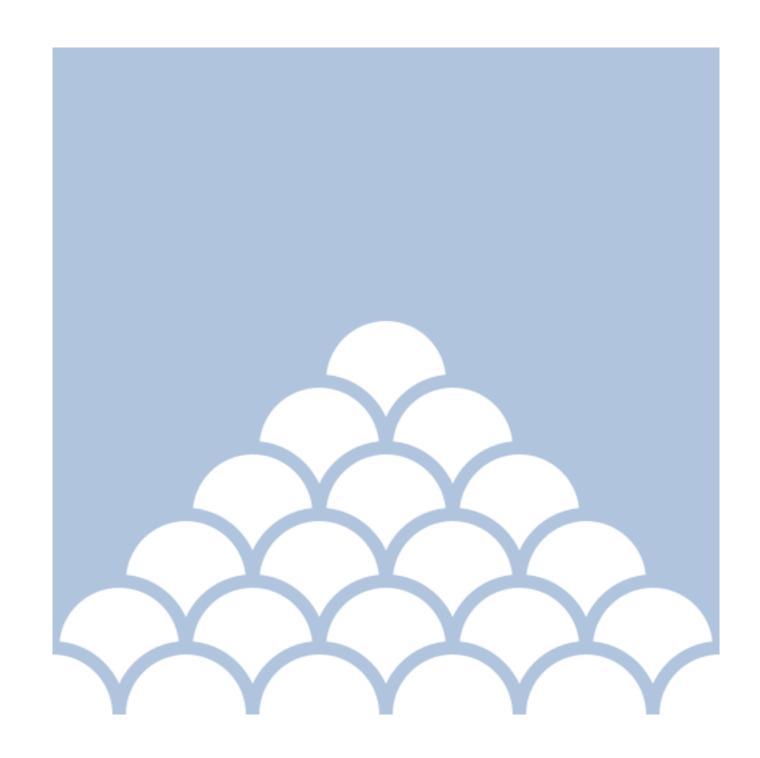
```
package main
import (
    "math/rand"
    "os"
    "time"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
// inspired by Gerhard Richter's 256 colors, 1974
func main() {
    rand.Seed(time.Now().Unix())
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height)
    w, h, gutter := 24, 18, 5
    rows, cols := 16, 16
    top, left := 20, 20
    for r, x := 0, left; r < rows; r++ {
        for c, y := 0, top; c < cols; c++ {
            canvas.Rect(x, y, w, h,
                canvas.RGB(rand.Intn(255), rand.Intn(255), rand.Intn(255)))
            y += (h + gutter)
        x += (w + gutter)
    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
    r := width / 20
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height)
    for x, y := 50, h2; x < 450; x += 75 {
        canvas.Circle(x, h2, r+1, "fill:white")
        canvas.Circle(x, y, r, "fill:black")
        y += 10
    canvas.End()
```



```
package main
import (
    "fmt"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    nr := 6
    radius := width / 10
    x := width / 2
    y := height / 2
    fgcolor := "white"
    bgcolor := "lightsteelblue"
    sw := width / 50
    sfmt := "fill:%s;;stroke:%s;stroke-width:%dpx"
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height, "fill:"+bgcolor)
    canvas.Gstyle(fmt.Sprintf(sfmt, fgcolor, bgcolor, sw))
    for r := 0; r < nr; r++ {
        xc := x
        for c := 0; c < r+1; c++ {
            canvas.Circle(xc, y, radius)
            xc += radius * 2
        x -= radius
        y += radius
    canvas.Gend()
    canvas.End()
```



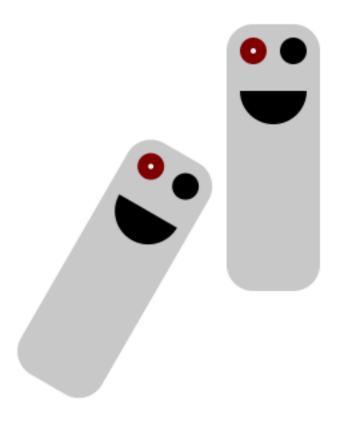
```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func cloud(x, y, r int, style string) {
    small := r / 2
    medium := (r * 6) / 10
    canvas.Gstyle(style)
    canvas.Circle(x, y, r)
    canvas.Circle(x+r, y+small,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

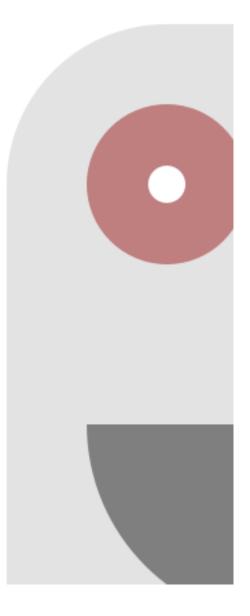


```
package main
import (
    "math/rand"
    "os"
    "time"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func cloud(x, y, r int, style string) {
    small := r / 2
    medium := (r * 6) / 10
    canvas.Gstyle(style)
    canvas.Circle(x, y, r)
    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()
```

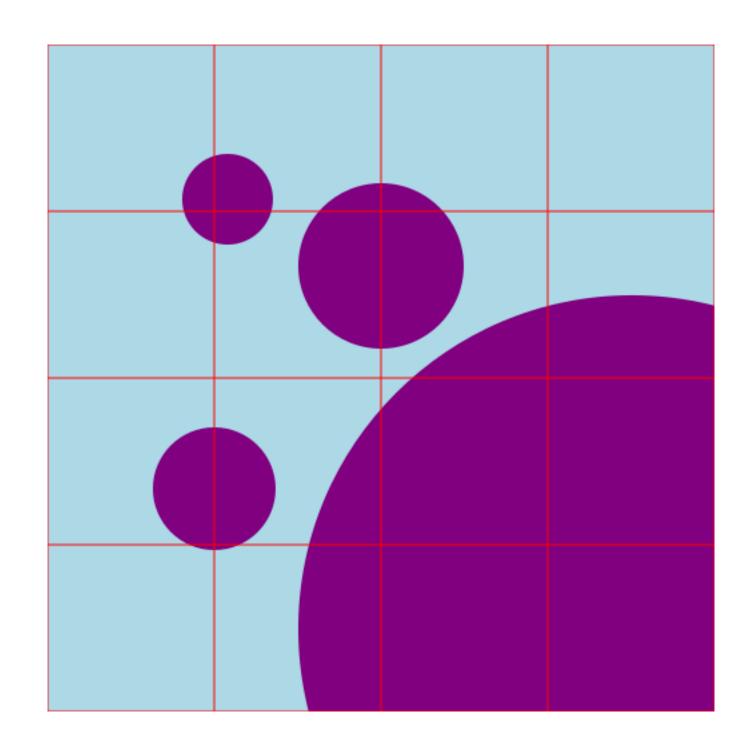


```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var canvas = svg.New(os.Stdout)
func smile(x, y, r int) {
    r2 := r * 2
    r3 := r * 3
    r4 := r * 4
    rq := r / 4
    gray := canvas.RGB(200, 200, 200)
    red := canvas.RGB(127, 0, 0)
    canvas.Roundrect(x-r2, y-r2, r*7, r*20, r2, 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()
```

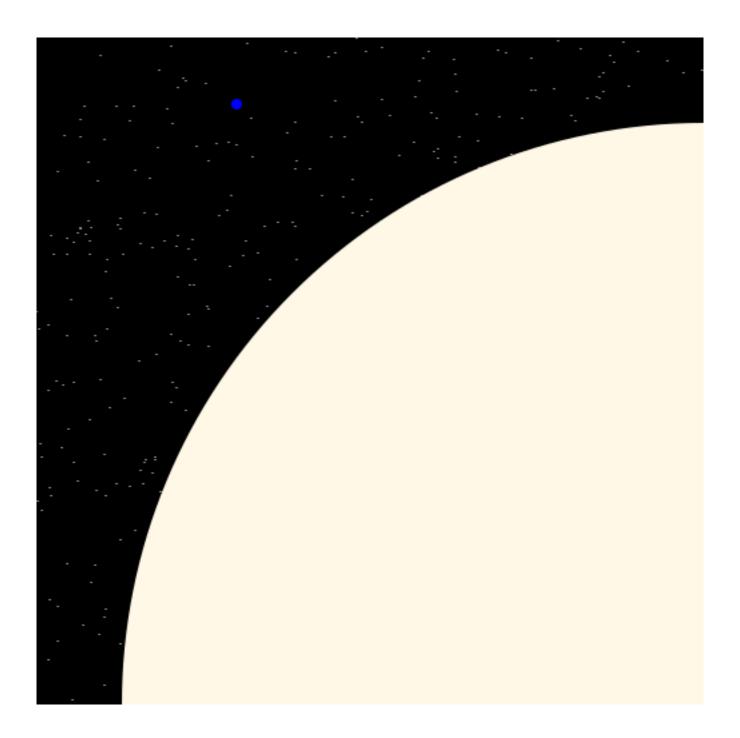




```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func dot(x, y, d int) {
    canvas.Circle(x, y, d/2, "fill:rgb(128,0,128)")
// Composition from "Design for Hackers, pg. 129
func main() {
    d1 := height
    d2 := 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()
```



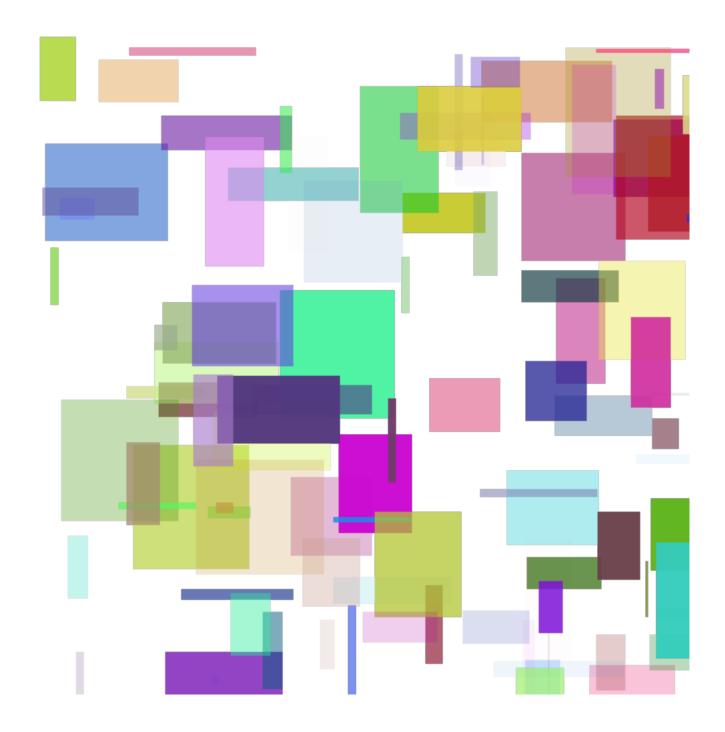
```
package main
import (
    "math/rand"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
   height = 500
func main() {
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height, "fill:black")
    for i := 0; i < width; i++ {
        x := rand.Intn(width)
        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")
    canvas.Circle(width, height, sun, "fill:rgb(255, 248, 231)")
    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"
    "time"
    "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() {
    rand.Seed(time.Now().Unix())
    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()
```

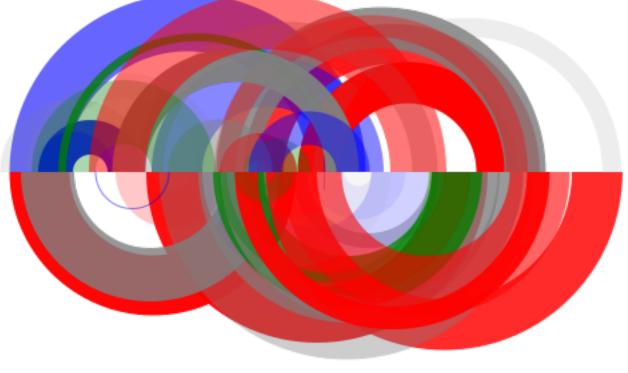
```
package main
import (
    "math/rand"
    "os"
    "time"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    canvas.Start(width, height)
    rand.Seed(time.Now().Unix())
    for i := 0; i < 100; i++ {
        fill := canvas.RGBA(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

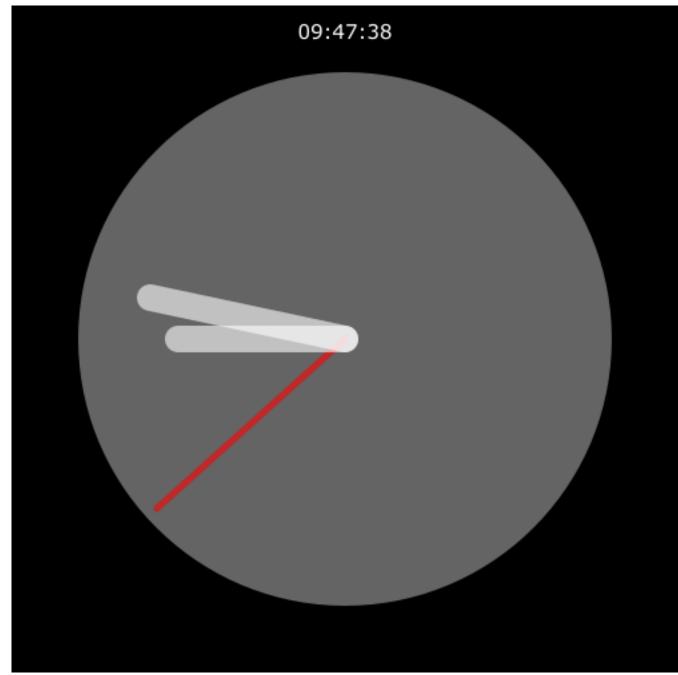


```
package main
import (
    "fmt"
    "math/rand"
    "os"
    "time"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func randarc(aw, ah, sw int, f1, f2 bool) {
    colors := []string{"red", "green", "blue", "gray"}
    afmt := "stroke:%s;stroke-opacity:%.2f;stroke-width:%dpx;fill:none"
    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()
```

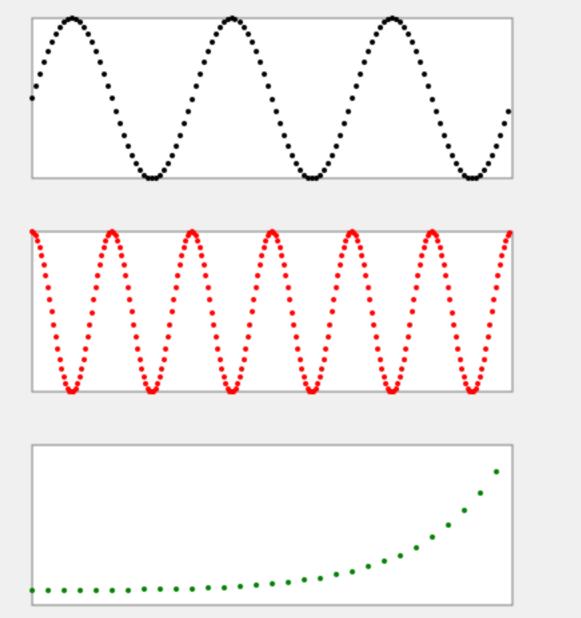


```
package main
import (
    "fmt"
    "os"
    "github.com/ajstarks/svgo"
var (
            = svg.New(os.Stdout)
    canvas
    width
             = 500
    height
           = 500
    maxlevel = 5
    colors = []string{"red", "orange", "yellow", "green", "blue"}
func branch(x, y, r, level int) {
    astyle := fmt.Sprintf("fill:none;stroke:%s;stroke-width:%dpx", colors[level%maxlevel], level*2)
    canvas.Arc(x-r, y, r, r, 0, true, true, x+r, y, astyle)
    if level > 0 {
        branch(x-r, y+r/2, r/2, level-1)
        branch(x+r, y+r/2, r/2, level-1)
// Example from "Generative Design", pg 414
func main() {
    canvas.Start(width, height)
    branch(0, 0, width/2, 6)
    canvas.End()
```

```
package main
import (
    "fmt"
    "github.com/ajstarks/svgo"
    "math"
    "os"
    "time"
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)
// See: Processing (Reas and Fry), pg. 247
func main() {
    w2, h2 := width/2, height/2
    h, m, s := time.Now().Clock()
    sec := vmap(float64(s), 0, 60, 0, math.Pi*2) - math.Pi/2
    min := vmap(float64(m), 0, 60, 0, math.Pi*2) - math.Pi/2
    hour := vmap(float64(h%12), 0, 12, 0, math.Pi*2) - math.Pi/2
    secpct := float64(width) * 0.38
    minpct := float64(width) * 0.30
    hourpct := float64(width) * 0.25
    facepct := (width * 40) / 100
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height)
    canvas.Text(w2, 25, fmt.Sprintf("%02d:%02d:%02d", h, m, s), "text-anchor:middle;font-size:12pt;fill:white")
    canvas.Circle(w2, h2, facepct, canvas.RGB(100, 100, 100))
    canvas.Gstyle("stroke:white;stroke-width:20;stroke-opacity:0.6;stroke-linecap:round")
    canvas.Line(w2, h2, int(math.Cos(sec)*secpct)+w2, int(math.Sin(sec)*secpct)+h2, "stroke:red;stroke-width:5")
    canvas.Line(w2, h2, int(math.Cos(min)*minpct)+w2, int(math.Sin(min)*minpct)+h2)
    canvas.Line(w2, h2, int(math.Cos(hour)*hourpct)+w2, int(math.Sin(hour)*hourpct)+h2)
    canvas.Gend()
    canvas.End()
```

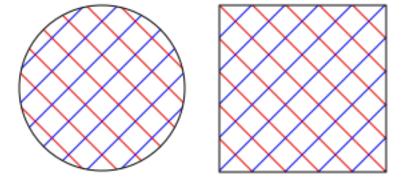


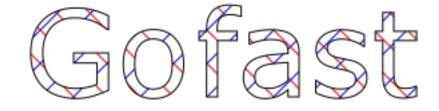
```
package main
import (
    "math"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func vmap(value float64, l1 float64, h1 float64,
    l2 float64, h2 float64) float64 {
    return l2 + (h2-l2)*(value-l1)/(h1-l1)
func plotfunc(left, top, 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 {</pre>
        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() {
    canvas.Start(width, height)
    canvas.Rect(0, 0, width, height, "fill:rgb(240,240,240)")
    plotfunc(80, 20, 360, 120, 0, 6*math.Pi, -1, 1, math.Pi/20, math.Sin)
    plotfunc(80, 180, 360, 120, 0, 12*math.Pi, -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()
```



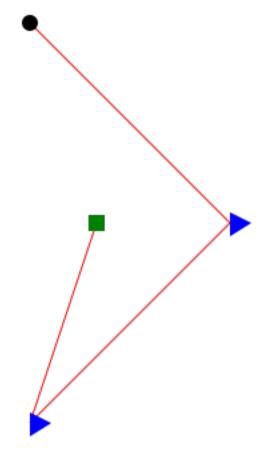
```
package main
import (
    "fmt"
    "os"
                                                                               Cost
                                                                                                   100
    "github.com/ajstarks/svgo"
                                                                             Timing
                                                                                                                     250
var (
    canvas = svg.New(os.Stdout)
    width = 500
                                                                           Sourcing
    height = 500
                                                                         Technology
                                                                                                            175
type Measure struct {
    name string
    value int
func (data *Measure) meter(x, y, w, h int) {
    corner := h / 2
    inset := corner / 2
    canvas.Text(x-10, y+h/2, data.name, "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, data.value, h-(inset*2), inset, inset, "fill:darkgray")
    canvas.Circle(x+inset+data.value, y+corner, inset, "fill:red;fill-opacity:0.3")
    canvas.Text(x+inset+data.value+inset+2, y+h/2, fmt.Sprintf("%-3d", data.value),
        "font-size:75%;text-anchor:start;baseline-shift:-33%")
func main() {
    items := []Measure{{"Cost", 100}, {"Timing", 250}, {"Sourcing", 50}, {"Technology", 175}}
    x, y, gutter, mh := 100, 50, 20, 50
    canvas.Start(width, height)
    canvas.Gstyle("font-family:sans-serif;font-size:12pt")
    for _, data := range items {
        data.meter(x, y, width-100, mh)
        y += mh + gutter
    canvas.Gend()
    canvas.End()
                                                                                                               therm.go
```

```
package main
import (
    "fmt"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    pct := 5
    pw, ph := (width*pct)/100, (height*pct)/100
    canvas.Start(width, height)
    canvas.Def()
    canvas.Pattern("hatch", 0, 0, pw, ph, "user")
    canvas.Gstyle("fill:none;stroke-width:1")
    canvas.Path(fmt.Sprintf("M0,0 l%d,%d", pw, ph), "stroke:red")
    canvas.Path(fmt.Sprintf("M%d,0 l-%d,%d", pw, pw, ph), "stroke:blue")
    canvas.Gend()
    canvas.PatternEnd()
    canvas.DefEnd()
    x1 := width / 2
    x2 := (width * 4) / 5
    canvas.Gstyle("stroke:black; font-size: 72pt; text-anchor:middle; fill:url(#hatch)")
    canvas.Circle(x1, height/2, height/8)
    canvas.CenterRect(x2, height/2, height/4, height/4)
    canvas.Text(x1, height-50, "Go")
    canvas.Text(x2, height-50, "fast")
    canvas.Gend()
    canvas.End()
```

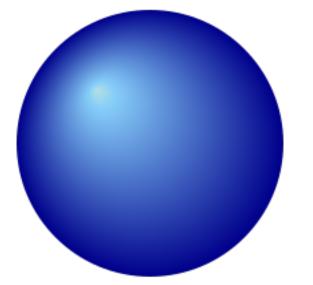




```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    canvas.Start(width, height)
    canvas.Def()
    canvas.Marker("dot", 10, 10, 16, 16)
    canvas.Circle(10, 10, 6, "fill:black")
    canvas.MarkerEnd()
    canvas.Marker("box", 10, 10, 16, 16)
    canvas.CenterRect(10, 10, 12, 12, "fill:green")
    canvas.MarkerEnd()
    canvas.Marker("arrow", 4, 12, 26, 26)
    canvas.Path("M4,4 L4,22 L20,12 L4,4", "fill:blue")
    canvas.MarkerEnd()
    canvas.DefEnd()
    x := []int{100, 250, 100, 150}
    y := []int{100, 250, 400, 250}
    canvas.Polyline(x, y,
        `fill="none"`,
        `stroke="red"`,
        `marker-start="url(#dot)"`,
        `marker-mid="url(#arrow)"`,
        `marker-end="url(#box)"`)
    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"
                                                                          Helvetica 10 12 16 21 24 36 48
    "os"
    "github.com/ajstarks/svgo"
                                                                           Times 10 12 16 21 24 36 48
var (
                                                                         COURTIER 10 12 16 21 24 36 48
    canvas = svg.New(os.Stdout)
   width = 500
   height = 500
                                                                         sans-serif 10 12 16 21 24 36 48
func main() {
   fonts := []string{
                                                                            serif 10 12 16 21 24 36 48
       "Helvetica", "Times", "Courier",
       "sans-serif", "serif", "monospace",
                                                                         monospace 10 12 16 21 24 36 48
   sizes := []int{10, 12, 16, 21, 24, 36, 48}
   largest := sizes[len(sizes)-1]
    gutter := largest + (largest / 3)
   margin := gutter * 2
   v := 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()
```

```
package main
                                                                00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
import (
                                                           2600 ♥ ♣ ♠ ff ~ ★ ★ ƙ ß ⊙ ଋ ೪ ४ ♂ ☎ ☜
   "fmt"
                                                           2610 □ 🗸 🗶 × 🌴 🐎 △ 🛕 🗫 🕓 🕶 🖘
   "os"
                                                               2620
   "github.com/ajstarks/svgo"
                                                           2630 ≡ ≡ ≡ ≡ ≡ ≡ ⊕ ⊗ ⊕ ♥ ⊃
                                                           2650 🖈 🎾 🗯 🖀 🚊 🗐 🐧
var (
                                                           2660 ♠ ♡ ◊ ♣ 쇼 ♥ ♦ 숖 ♨ ㅣ ♪ ♬ ♬
   canvas = svg.New(os.Stdout)
   width = 500
                                                           2670 + + & A A A A A A A A A B 🚱 😂 🛇 🗟
   height = 500
                                                           2690 戸 ▶ ♦ ↓ ※ ≯ ☆ 常 ♥ ♥ ☆ 会 ≥ ∈
func main() {
                                                           26A0 <u>Λ</u> γ φ ở ở ở ở ở ở ở ở ο ο ο ο ο ο
   top, left, fontsize := 50, 100, 16
                                                           26B0 ∽ ♡ ♀ ? ♀ ★ ≴ ≴ $ ★ ⊻ ⊼ ᡚ ❖ ♡ ¶
   xoffset, yoffset := 25, 25
                                                           26C0 ⊕ 🗑 🕶 📽 🖰 🕮 🎏 🥞 ▽ 🔻 🖸 🗙 🖏 🖫 🤘
   rows, cols := 16, 16
                                                           26D0 🕏 \varTheta ⊗ 👯 🗢 🕏 🗘 🗶 🛣 🔼 🔼 🔼
   glyph := 0x2600
                                                           26E0 ¶ ፟ å å ☆ ★ ★ ♥ Ħ ሕ 尚 ∴ ☆ ☆ ❖
   font := "Symbola"
   stylefmt := "font-family:%s;font-size:%dpx;text-anchor:middle"
                                                               canvas.Start(width, height)
   canvas.Gstyle(fmt.Sprintf(stylefmt, font, fontsize))
   x, y := left, top
   for r := 0; r < rows; r++ \{
      canvas.Text(x-yoffset, y, fmt.Sprintf("%X", glyph), "text-anchor:end;fill:gray")
      for c := 0; c < cols; c++ {
         if r == 0 {
            canvas.Text(x, y-yoffset, fmt.Sprintf("%02X", c), "fill:gray")
         }
         canvas.Text(x, y, string(glyph))
         glyph++
         x += xoffset
      }
      x = left
      y += yoffset
   canvas.Gend()
   canvas.End()
```

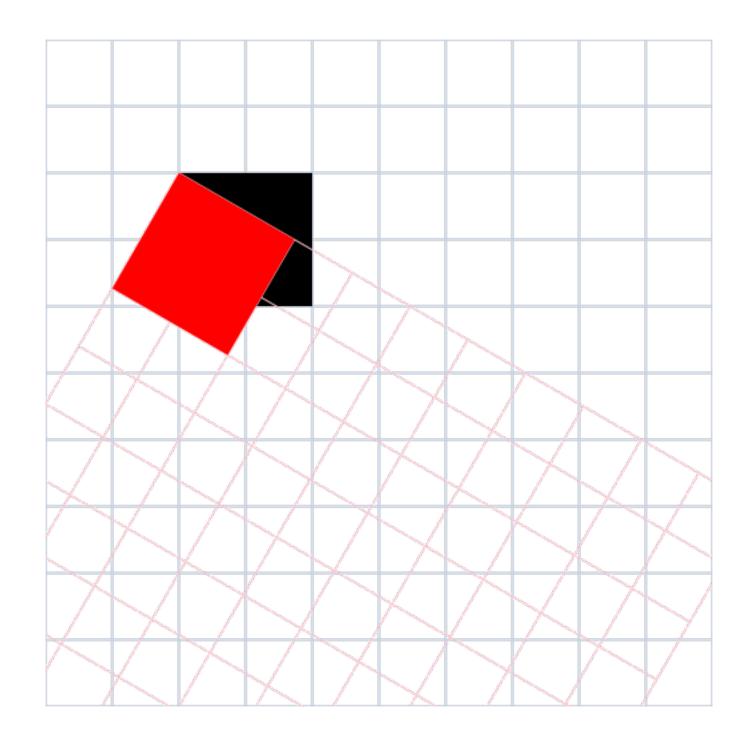
```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func main() {
    lorem := []string{
        "Lorem ipsum dolor sit amet, consectetur adipiscing",
        "elit, sed do eiusmod tempor incididunt ut labore et",
        "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()
```

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

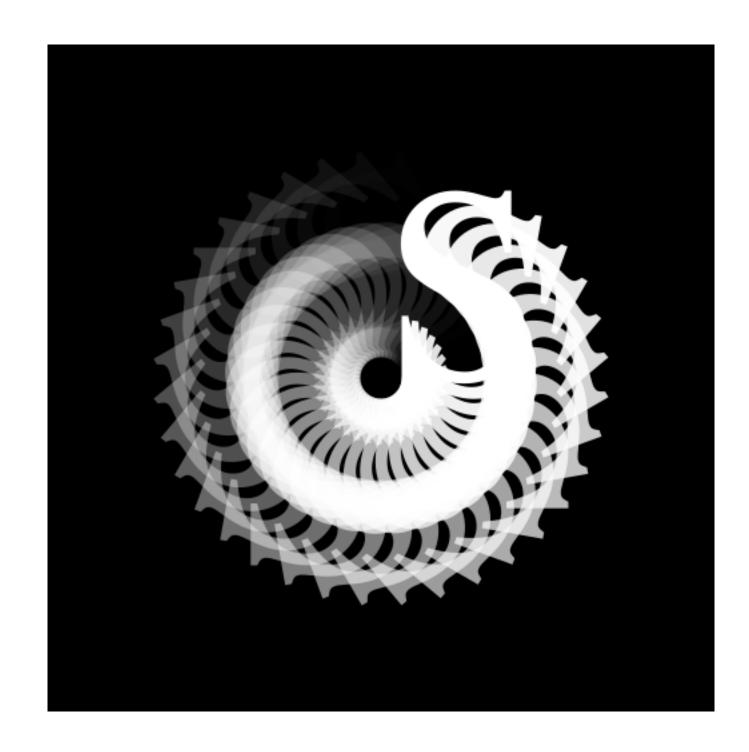
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit

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

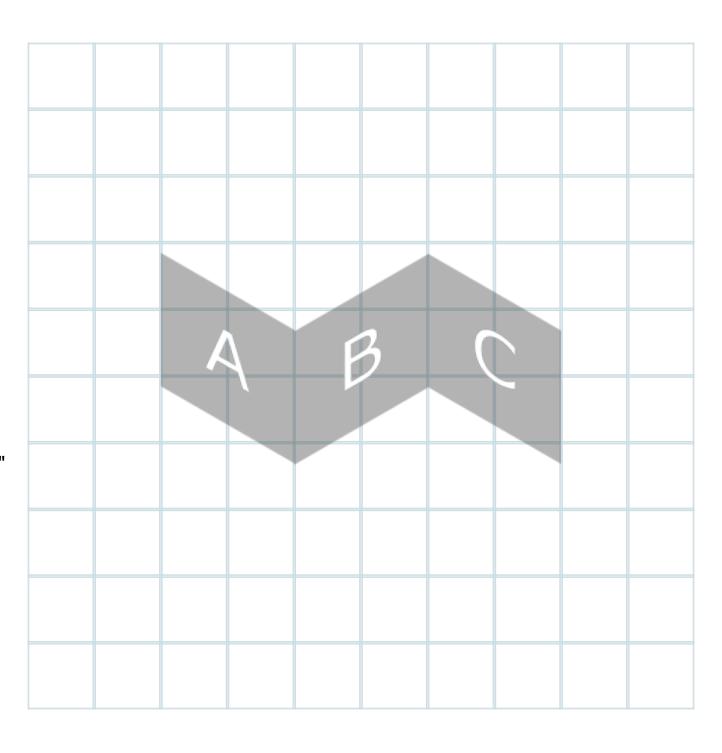
```
package main
import (
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func tro() {
    canvas.Rect(100, 100, 100, 100)
    canvas.TranslateRotate(100, 100, 30)
    canvas.Grid(0, 0, width, height, 50, "stroke:pink")
    canvas.Rect(0, 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, "s", canvas.RGBA(255, 255, 255, a))
        canvas.Gend()
        a -= ai
    canvas.Gend()
    canvas.End()
```

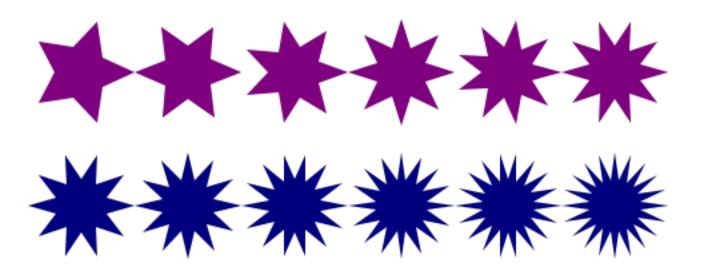


```
package main
import (
    "fmt"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func sky(x, y, w, h, a int, s string) {
    tfmt := "font-family:sans-serif;font-size:%dpx;text-anchor:middle"
    canvas.Gstyle(fmt.Sprintf(tfmt, w/2))
    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"
    "os"
    "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. Translate Rotate (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 (
    "math"
    "os"
    "github.com/ajstarks/svgo"
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, i := 50, 5; i <= 10; i++ {
        star(x, 200, i, 20, 40, canvas.RGB(127, 0, 127))
        star(x, 300, i*2, 20, 40, canvas.RGB(0, 0, 127))
        x += 80
    canvas.End()
```



```
package main
import (
    "fmt"
    "os"
    "github.com/ajstarks/svgo"
var (
                                                                         begin (70,200)
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func coord(x, y, size int, label string) {
    tstyle := "text-anchor:middle;font-size:14pt"
    offset := size + (size / 2)
    canvas.Text(x, y-offset, fmt.Sprintf("%s (%d,%d)", label, x, y), tstyle)
    canvas.Circle(x, y, size)
                                                                           control (100,425)
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()
```

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()
```

(70,200)

E

Candy" to have text on a path

Candy" to have text on a path

(100,425)

(425, 125)

```
package main
import (
    "fmt"
    "os"
    "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, 100, 124, "gopher.jpg", fmt.Sprintf("opacity:%.2f", opacity))
        opacity -= 0.15
    canvas.End()
```

```
package main
import (
    "fmt"
    "os"
    "github.com/ajstarks/svgo"
var canvas = svg.New(os.Stdout)
func main() {
    gutter, nc := 10, 2
    iw, ih := 200, 112
    pw, ph := (iw*nc)+gutter*(nc+1), (ih*3)+gutter*4
    canvas.Start(pw, ph)
    canvas.Def(); canvas.Filter("f0"); canvas.Saturate(1.0); canvas.Fend()
    canvas.Filter("f1")
    canvas.FeComponentTransfer()
    canvas.FeFuncTable("G", []float64{0, 0.5, 0.6, 0.85, 1.0})
    canvas.FeCompEnd()
    canvas.Fend()
    for i, b := 0, 0.0; b < 20.0; b += 2.0 {
        canvas.Filter(fmt.Sprintf("blur%d", i))
        canvas.Blur(b)
        canvas.Fend()
        i++
    canvas.DefEnd()
    x, y := gutter, gutter
    canvas.Gstyle("text-anchor:middle;fill:white;font-family:sans-serif;font-size:24pt")
    for i, f := range []string{"f0", "f1", "blur1", "blur2"} {
        if i != 0 && i%nc == 0 {
            x = gutter
            y += ih + gutter
        canvas.Image(x, y, iw, ih, "maple.jpg", "filter:url(#"+f+")")
        canvas. Text(x+iw/2, y+ih/2, f)
        x += iw + gutter
    canvas.Gend()
    canvas.End()
```



```
package main
import (
    "fmt"
    "os"
    "github.com/ajstarks/svgo"
var (
    canvas = svg.New(os.Stdout)
    width = 500
    height = 500
func tf(x, y int, s string, size float64) {
    canvas.Text(x, y, s,fmt.Sprintf("font-size:%gpt",size))
func main() {
    x, y := 50, 40
    canvas.Start(width, height)
    canvas.Rect(0,0,width,height, canvas.RGB(72, 45, 77))
    canvas.Gstyle("font-family:Roboto;fill:white")
    tf(x, y, "A MAN WHO WORKS WITH HIS HANDS IS A LABORER", 12); y += 70
    tf(x, y, "A MAN WHO", 52); y += 100
    tf(x, y, "WORKS", 87); y += 40
    tf(x, y, "WITH HIS HANDS AND HIS BRAIN IS A CRAFTSMAN", 13); y += 50
    tf(x, y, "BUT A MAN WHO", 37); y += 30
    tf(x, y, "WORKS WITH HIS HANDS AND HIS BRAIN", 15); y += 50
    tf(x, y, "AND HIS HEART IS", 35.4); y += 80
    tf(x, y, "AN ARTIST", 60)
    canvas.Gend()
    canvas.End()
```

A MAN WHO WORKS WITH HIS HANDS IS A LABORER

A MAN WHO WORKS

WITH HIS HANDS AND HIS BRAIN IS A CRAFTSMAN

BUT A MAN WHO

WORKS WITH HIS HANDS AND HIS BRAIN

AND HIS HEART IS AND ARTIST