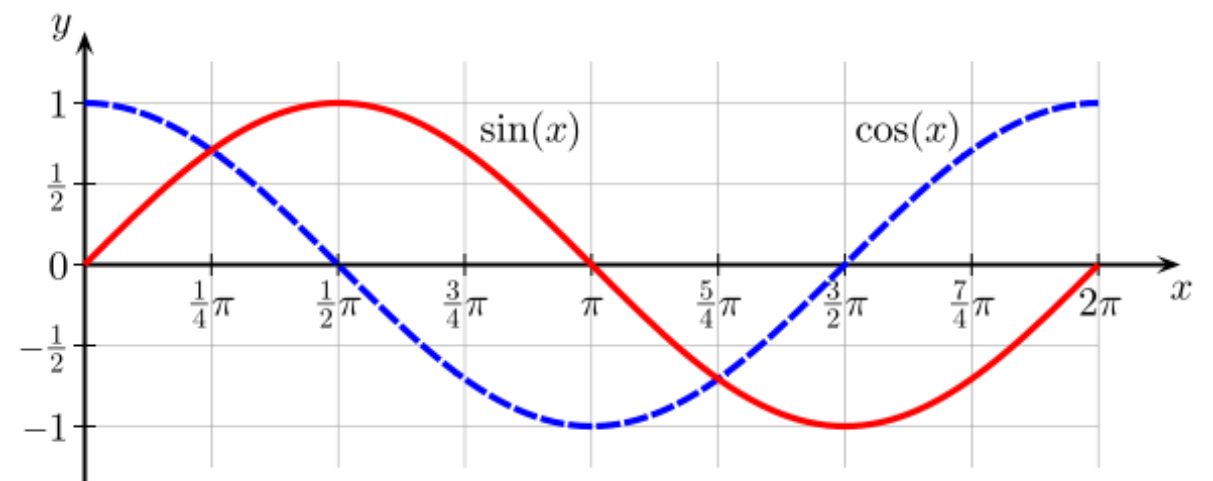```
using Plots
gr()
default(fmt = :png)
```

[2]: ```
using DataFrames
```

Using Plots.jl

Plots.jl outputs plots in different formats. It is written in Julia:


```
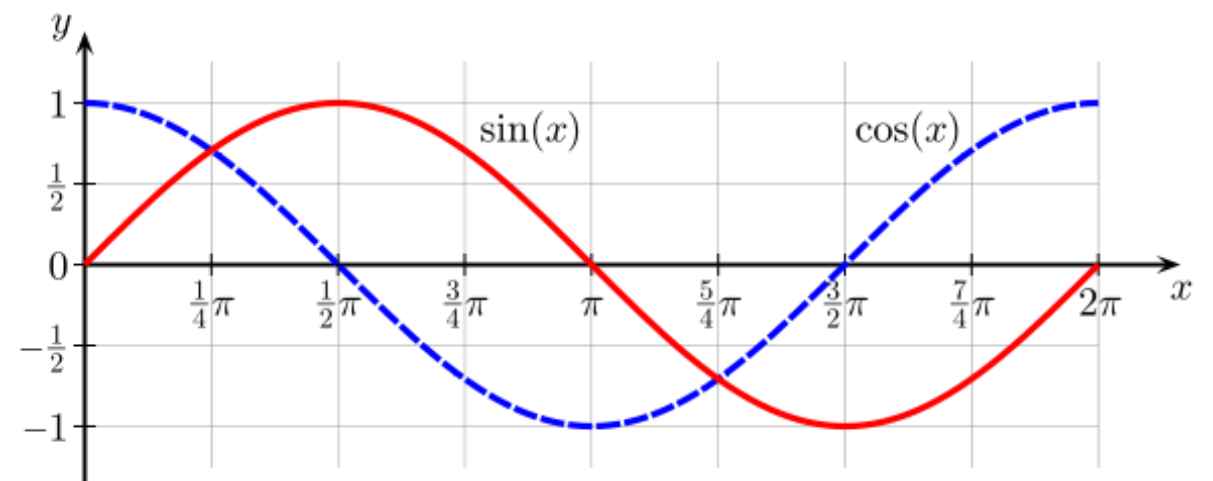f(x) = sin(x)
g(x) = cos(x)
```
[21]: ```
h(x) = tan(x)
```

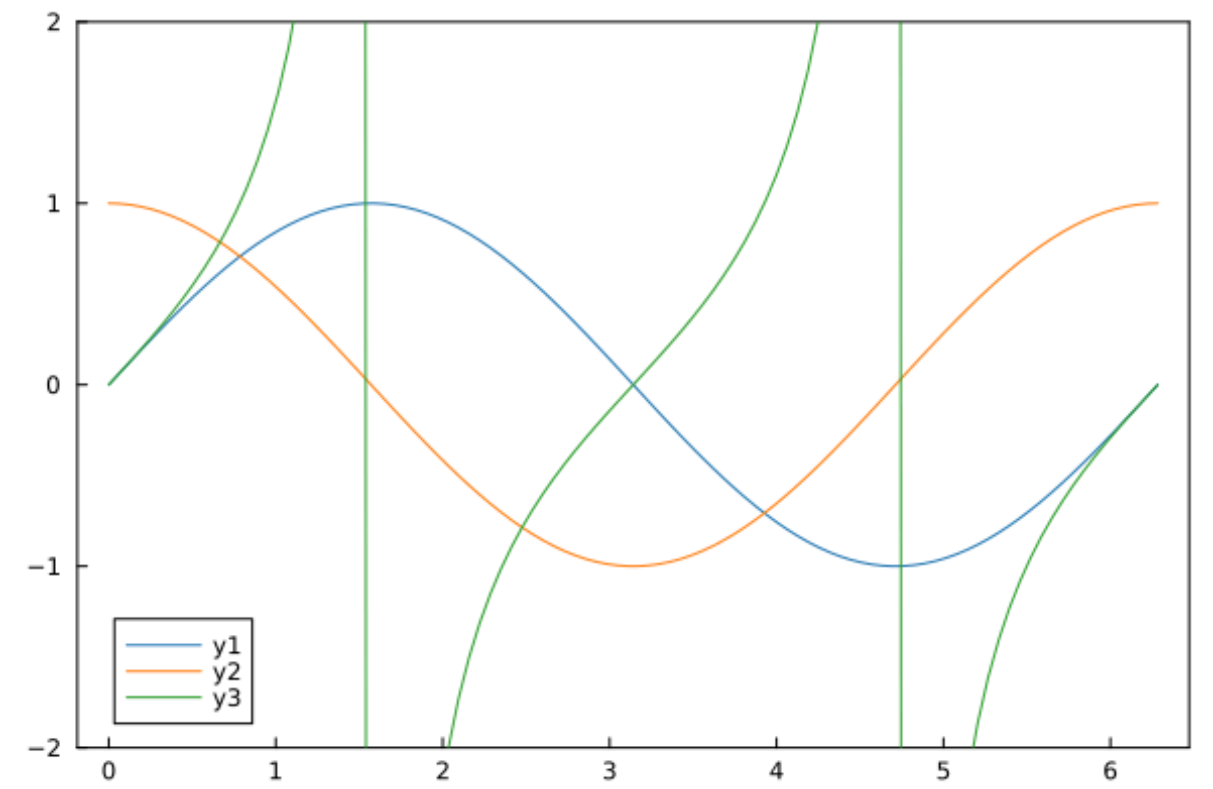h (generic function with 1 method)

[22]: ```
xs = LinRange(0, 2pi, 100)
```

100-element LinRange{Float64, Int64}:
 0.0, 0.0634665, 0.126933, 0.1904, …, 6.09279, 6.15625, 6.21972, 6.28319

These are the trigonometric functions, $\sin(x) \cos(x) \tan(x)$ According to Wikipedia, their graphs look like this:


```
plot(xs, [f, g, h]; ylim = (-2, 2), framestyle = :box, grid = false, palette
```
[23]: ```
= :tab10)
```



Let's produce an error:

[24]: ```
i(x)
```

UndefVarError: `i` not defined

Stacktrace:
 [1] top-level scope
    @ In[24]:1

Rich Outputs

We can try some table outputs, for example:

[3]: ```
df = DataFrame((col1 = ["First", "Second", "Third"], col2 = [1, 2, 3]))
```

3×2 DataFrame

| Row | col1 | col2 |
|---|---|---|
| | String | Int64 |
| 1 | First | 1 |
| 2 | Second | 2 |
| 3 | Third | 3 |