

**Fortex** is a “stack of wheels”. It is an intensification of **Jagged**, so it’s better to understand that program first.

The essence of the program is in these three functions:

```
function stack(f)
  s = 0
  for i in eachindex(f) s += f[i][begin] end
  s
end
function twist!(f,a,n)
  for i in eachindex(f) f[i][1] = mod(f[i][1] + a,n) end
end
function roll!(f, a)
  for i in eachindex(f) f[i] = circshift(f[i],f[mod1(i-1,length(f))][1] + a + 1) end
end
function encode(p,f,n)
  c = Int64[]
  for i in eachindex(p)
    push!(c, mod( stack(f) + p[i], n))
    twist!(f,c[i],n)
    roll!(f, p[i])
  end
  c
end
```

The big change is that rolling/spinning speed varies between “rows” and is a function not only of the latest plaintext symbol but also of the row above (in a wraparound fashion.) So **Fortex** should be more secure than **Jagged**.