```
using Distributions

function thompson_sampling(α, β, apply; T=100)
    for t in 1:T
        θ = rand.(Beta.(α, β))
        x = argmax(θ)
        r = apply(x)
        α[x], β[x] = (α[x] + r, β[x] + 1 - r)
    end
    return Beta.(α, β)
end
```