```
using Distributions

function thompson_sampling(\alpha, \beta, apply; T=100)

for t in 1:T

\theta = \text{rand.}(\text{Beta.}(\alpha, \beta))

x = \text{argmax}(\theta)

r = \text{apply}(x)

\alpha[x], \beta[x] = (\alpha[x] + r, \beta[x] + 1 - r)

end

return Beta.(\alpha, \beta)

end

end
```