```
PERCEPTRON(τ, D_n)
 1  θ = [0  0  ···  0]^T
 2  θ_0 = 0
 3  for t = 1 to τ
 4        changed = False
 5        for i = 1 to n
 6              if y^(i) (θ^T x^(i) + θ_0) ⩽ 0
 7                    θ = θ + y^(i) x^(i)
 8                    θ_0 = θ_0 + y^(i)
 9                    changed = True
10        if NOT changed
11              break
12  return θ, θ_0
```