$$\operatorname{start} \longrightarrow \underbrace{S_00} \longleftarrow \underbrace{1} \longrightarrow \underbrace{S_10} \longleftarrow \underbrace{0} \longrightarrow \underbrace{S_20} \longleftarrow \underbrace{1} \longrightarrow \underbrace{S_30} \longleftarrow \underbrace{0} \longrightarrow \underbrace{S_40} \longrightarrow \underbrace{0} \longrightarrow \underbrace{S_51}$$