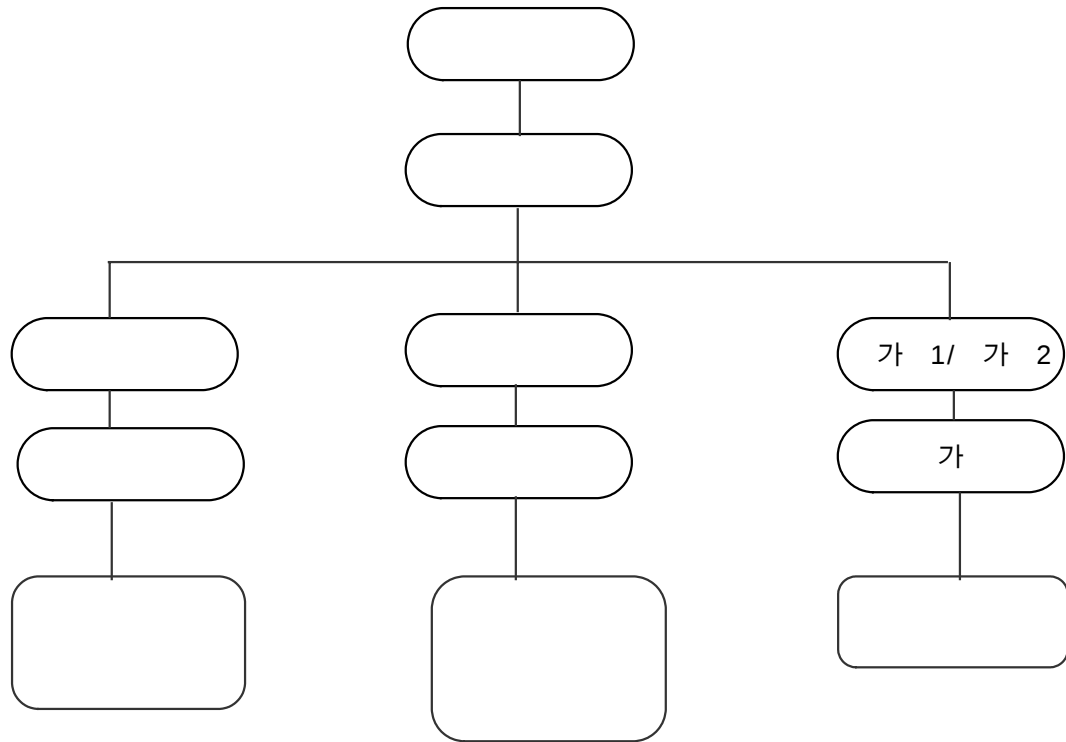


2-4.

1)



2)

(1) :

(2) 가 : 가

(3) :

$$(4) \quad \vdash \frac{\vdash \varphi \rightarrow \psi \quad \vdash \psi \rightarrow \chi}{\vdash \varphi \rightarrow \chi} \rightarrow$$

(5) $\vdash \vdash, \vdash, \vdash, \vdash, \vdash$

(6) $\vdash$, $\vdash$,

(7) 가 : 가 가 , , 가

(8) :

(9) :