

# Practice TRC Solutions

October 5, 2023

## Question 13

Each person works for a company and has at least two job skills.

$$\{\neg\exists p(Person(p) \wedge (\neg\exists w(worksFor(w) \wedge w.pid = p.pid) \vee \neg\exists ps_1\exists ps_2(personSkill(ps_1) \wedge personSkill(ps_2) \wedge ps_1.skill \neq ps_2.skill \wedge ps_1.pid = p.pid \wedge ps_2.pid = p.pid)))\}$$

## Question 14

For each company, list its name along with the lowest salary made by employees who work for it

$$\{w_1.cname, w_1.salary \mid worksFor(w_1) \wedge \forall w_2 \in worksFor (w_2.cname = w_1.cname \rightarrow w_1.salary \leq w_2.salary)\}$$