6. $\Pi_{p.pid,p.pname}$ (Person $\bowtie_{p.pid=w.pid \wedge w.cname='Google'}$ worksFor $\Pi_{p1.pid=k.pid1}$ Knows $\bowtie_{w1.pid=k.pid2 \wedge w1.cname='Google' \wedge w.salary >w1.salary}$ worksFor $\bowtie_{p1.pid=k.pid2}$ Person1)

7. $\Pi_{q.cname,q.pid,q.pname,q.salary}$ ($\Pi_{c.cname,p.pid,p.pname,w.salary}$ (Person $\bowtie_{p.pid=w.pid}$ worksFor $\bowtie_{c.headquarter='Cupertino' \wedge c.cname=w.cname}$ Company $\bowtie_{l.city<>'Indianapolis'}$ companyLocation $\bowtie_{w1.salary<w.salary \wedge w.cname=w1.cname}$ WorksFor1) - $\Pi_{c.cname,p.pid,p.pname,w.salary}$ (Person $\bowtie_{p.pid=w.pid}$ worksFor $\bowtie_{c.headquarter='Cupertino' \wedge c.cname=w.cname}$ Company $\bowtie_{l.city<>'Indianapolis'}$ companyLocation $\bowtie_{w1.salary<w.salary \wedge w.cname=w1.cname}$ WorksFor1 $\bowtie_{w2.salary<w.salary}$ WorksFor2 $\bowtie_{w3.salary<w2.salary}$ WorksFor))q

8. $\Pi_{q1.wcname,q1.ppid}$ ($\Pi_{w.cname\ as\ wcname,\ p.pid\ as\ ppid}$ (Person $\bowtie_{p.pid=w.pid}$ WorksFor) - ($\Pi_{q.wcname,q.ppid}$ ($\Pi_{w.cname\ as\ wcname,p.pid\ as\ ppid,p1.pid,w1.pid}$ (Person $\bowtie_{p.pid=w.pid}$ WorksFor $\bowtie_{w.cname=w1.cname \wedge}$

$_{w.pid<>w1.pid}$ WorksFor1 $\bowtie$ $_{p1.pid=w1.pid}$ Person$)$ $-($$\Pi$ $_{w.cname\ as}$

$_{wcname,p.pid\ as\ ppid,p1.pid,w1.pid}$$($Person $\bowtie$ $_{p.pid=w.pid}$ WorksFor $\bowtie$

$_{w.cname=w1.cname\ \wedge\ w.pid<>w1.pid}$ WorksFor1 $\bowtie$ $_{p1.pid=w1.pid}$ Person $\bowtie$

$_{w.pid=k.pid2\ \wedge\ w1.pid=k.pid1}$ Knows $)))$q$)$q1

9. $\Pi_{s.skill}$ $($Skill$)$ $-$ Π $_{ps.skill}$$($Person $\bowtie$ $_{ps.pid=p.pid}$

PersonSkill $\bowtie$ $_{p.pid=w.pid\ \wedge\ (\ w.cname='Netflix')}$ worksFor$)$

10.Π $_{p.pid,p.pname}$ $($Person $\bowtie$ $_{p.pid=h.mid}$ hasManager$)$ $-$ Π

$_{p.pid,p.pname}$ $($ Person $\bowtie$ $_{p.pid=h.mid}$hasManager $\bowtie$ $_{w2.cname='Google'}$

worksFor2 $\bowtie$ $_{h2.eid=w2.pid\ \wedge\ h.mid<>h2.mid}$ hasManager2$)$

11.Π $_{p.pid}$$($Person $\bowtie$ $_{p.pid\ =h.mid}$ hasManager $\bowtie$ $_{w.pid=h.mid}$

worksFor $\bowtie$ $_{w1.pid=h.eid\ \wedge\ w.salary<w1.salary}$ worksFor1$)$ $=$ $\varnothing$

12. $\Pi_{k.pid1,k.pid2,w.cname}\left(Knows \bowtie_{k.pid2=w.pid \text{ and } w.cname='Google'} worksFor\right) \bowtie \left(\Pi_{k.pid1,k.pid2,w.cname}\left(Knows \bowtie_{w.pid=k.pid2 \wedge w.cname='Google'} worksFor\right) \neq \varnothing\right.$

13. $\Pi_{pid}\left(Person\right) \subseteq \Pi_{h.eid}\left(hasManager \bowtie_{h.eid=k.pid1 \wedge h.mid=k.pid2} Knows\right)$

14. $\Pi_{pid}\left(Person\right) \subseteq \Pi_{h.eid}\left(hasManager \bowtie_{h.eid=w1.pid} worksFor1 \bowtie_{h.mid=w2.pid \wedge w1.cname=w2.cname} worksFor2\right)$

15. $\Pi_{p.pid}\left(Person \bowtie_{p.pid=p1.pid \wedge p.pname<>p1.pname} Person1\right) = \varnothing$