

Assignment 3: Relational Algebra

1. $\sigma_{\text{name}='Peter\ Smith'} (\text{Client})$
2. $\sigma_{\text{frequency}>5} (\text{AirtimePackage})$
3. $\Pi_{\text{videoCode}}(\sigma_{\text{siteCode}='S345'} (\text{Broadcasts}))$
4. $\Pi_{\text{serialNo}} (\text{Locates} \bowtie \sigma_{\text{type}='restaurant'} (\text{Site}))$
5. $\Pi_{\text{empId},\text{name}} (\sigma_{\text{modelNo}='M456781'} (\text{Specializes} \bowtie \text{TechnicalSupport}))$
6. $\Pi_{\text{modelNo}} (\sigma_{\text{name}='Peter'} (\text{Specializes} \bowtie \text{TechnicalSupport} \bowtie \text{Model}))$
7. $\Pi_{\text{videoCode},\text{videoLength}} (((\sigma_{\text{siteCode}=111} (\text{Broadcasts})) - \sigma_{\text{siteCode}=112} (\text{Broadcast})) \bowtie \text{Video})$
8. $\Pi_{\text{name}} (\text{TechnicalSupport}) \cup \Pi_{\text{name}} (\text{Administrator}) \cup \Pi_{\text{name}} (\text{Salesman})$
9. $\Pi_{\text{empId},\text{name}} (\sigma_{\text{modelNo}='M01'} (\text{Specializes} \bowtie \text{TechnicalSupport}))$
10. $\Pi_{\text{empId},\text{name}} ((\text{Purchases} \bowtie \text{Salesman}) - \text{Purchases})$