

$$a. \pi_{\text{loan\_number}} (\sigma_{\text{amount} > 1200} (\text{loan}))$$

$$b. \pi_{\text{customer\_name}} (\text{depositor}) \cup \pi_{\text{customer\_name}} (\text{borrower})$$

$$c. \pi_{\text{customer\_name}} (\sigma_{\text{branch\_name} = \text{"Perryridge"}} (\text{loan}) \bowtie \text{borrower})$$

$$d. \pi_{\text{customer\_name}} (\sigma_{\text{branch\_name} = \text{"Perryridge"}} (\text{loan}) \bowtie \text{borrower}) \\ - \pi_{\text{customer\_name}} (\text{depositor})$$

$$e. \gamma_{\text{max}(\text{balance})} (\text{account})$$

$$f. \pi_{\text{customer\_name}} (\sigma_{\text{branch\_name} = \text{"Downtown"}} (\text{account}) \bowtie \text{depositor}) \cap \\ \pi_{\text{customer\_name}} (\sigma_{\text{branch\_name} = \text{"Uptown"}} (\text{account}) \bowtie \text{depositor})$$

g. Division Alg

$$\pi_{\text{customer\_name}} ( \pi_{\text{account\_number, customer\_name}} (\text{depositor}) \bowtie \pi_{\text{account\_number}} (\text{account}) )$$

$$/ ( \pi_{\text{account\_number}} (\sigma_{\text{branch\_name} = \text{"Downtown"}} (\text{account})) \cap \\ \pi_{\text{account\_number}} (\sigma_{\text{branch\_name} = \text{"Uptown"}} (\text{account})) ) )$$