

1. List names of products that haven't been sold.

$\Pi_{\text{prod\_desc}} ((\sigma_{\text{prod\_no}} \text{PRODUCT} - \sigma_{\text{prod\_no}} \text{SALE}) \bowtie \text{PRODUCT})$

2. List names of clerks who don't have any sales yet.

$\Pi_{\text{staff\_name}} (\sigma_{\text{staff\_position}=\text{"Clerk"}} ((\sigma_{\text{staff\_name}} \text{STAFF} - \sigma_{\text{sold\_by}} \text{SALE}) \bowtie \text{STAFF}))$

3. List categories (positions) of staff who have made sales.

$A = \rho_{\text{staff\_name}} \leftarrow \text{sold\_by} (\sigma_{\text{sold\_by}} (\text{SALE}))$

$\Pi_{\text{staff\_position}} ((\sigma_{\text{staff\_name}, \text{staff\_position}} (A)) \bowtie (\text{STAFF}))$