Lexzander Saplan – 014177252
David Brown – CECS 323

1. List the names of all **customers** that are located in the same state as an **office**

$\pi$ customerNames customers $\bowtie$ customers.state = offices.state offices

2. List the names of all **customers** who have ordered **products** where the vendor is "Classical Metal Creations"

$\pi$ customerNames $\sigma$ productVendor = 'Classical Metal Creations' (customers $\bowtie$ orders $\bowtie$ products)

3. List the names of all **customers** whose **order** was shipped within three days of being ordered

$\pi$ customerNames $\sigma$ (orders.shippedDate - orders.orderDate) <= 3 (customers $\bowtie$ orders)

4. List the names of all **customers**, their service reps and the **offices** that the service reps work in

$\pi$ customerNames, lastName, firstName, addressLine1, addressLine2 (customers $\bowtie$ employees $\bowtie$ offices)

5. List the names of all **customers** who didn't **order** any products in 2015

$\pi$ customerNames $\sigma$ orders.orderDate != 2015 (customers = $\bowtie$ orders)

6. List the **employee** first and last name, and their **customer**'s name even if the **employee** is not working with a **customer**

$\pi$ firstName, lastName, customerName (employee = $\bowtie$ employeeNum customer)

7. List all of the possible statuses for an **order**

$\pi$ status (orders)

8. List all **orders** where the quantity of a product orders is greater than the quantity of that product on hand

$\pi$ orderNumber $\sigma$ quantityOrdered > quantityInStock (orders $\bowtie$ (orderNumber) orderDetails $\bowtie$ products)

9. List the **Employee** last name and first name that work in Japan

$\pi$ lastName, firstName $\sigma$ country = 'Japan' (employees $\bowtie$ offices)