

### **Step #3: at least twelve query scenarios + SQL syntax**

**1. Count how many medications are in their categorized medication classes, display its medication class and total count of classes.**

```
select medicationClass, count(medicationClass) as count  
from medicationUseInfo group by medicationClass;
```

**2. Display all information related to medication with generic name of “Albuterol”;**

```
select mui.medicationClass, mui.mainPurpose,  
se.upperBody, se.lowerBody, ri.yearOfApproval,  
ri.prescriptionQuantity, ri.introduction, ri.URL, md.avgDose,  
md.doseRoute from medicationUseInfo mui inner join sideEffects  
se on mui.medicationID=se.medicationID join relatedInformation ri  
on se.medicationID = ri.medicationID join medicationDosage md  
on md.medicationID = ri.medicationID inner join medicationInfo mi  
on mi.medicationID = ri.medicationID where  
mi.genericName='Albuterol' ;
```

**3. Display the medications with the prescription quantity taken in the United States from lowest to highest .**

```
select mi.genericName, mi.brandName,  
ri.prescriptionQuantity from medicationInfo mi inner join  
relatedInformation ri on mi.medicationID = ri.medicationID order  
by ri.prescriptionQuantity asc;
```

**4. Display all medications’s generic and brand names for which the year of approval is between 1942 and 1969.**

```
select * from relatedInformation where yearOfApproval  
between 1942 and 1969;
```

**5. Display all medications’s generic and brand names for**

**which the year of approval is 1972.**

```
select mi.genericName, mi.brandName from  
medicationInfo mi join relatedInformation on mi.medicationID =  
relatedInformation.medicationID where yearOfApproval = 1972;
```

**6. Display all medication's generic and brand names along with a brief introduction about each medication.**

```
select mi.genericName, mi.brandName, ri.introduction from  
medicationInfo mi join relatedInformation ri on  
mi.medicationID=ri.medicationID ;
```

**7. Display all medication IDs of medications that are prescribe by oral, injection, and solution dosage routes.**

```
select medicationID from medicationDosage where  
doseRoute like 'oral, injection, solution';
```

**8. Display generic names of medications that are approved in 1972 and have prescription quantity more than 10 million people.**

```
select mi.genericName from medicationInfo mi join  
relatedInformation ri on mi.medicationID=ri.medicationID where  
ri.yearOfApproval = 1972 and ri.prescriptionQuantity > 10000000;
```

**9. Count how many medications are in their categorized medication classes, display its medication class and total count of classes having count more than 2.**

```
select medicationClass, count(medicationClass) as count  
from medicationUseInfo group by medicationClass having  
count(medicationClass) >2;
```

**10. Display generic and brand name, upper and lower body side effects order by prescription quantity from highest to least.**

```
select mi.genericName, mi.brandName, se.upperBody,
```

```
se.lowerBody from medicationInfo mi join sideEffects se on  
mi.medicationID=se.medicationID join  
relatedInformation ri on se.medicationID=ri.medicationID group  
by mi.medicationID order by ri.prescriptionQuantity desc
```

**11. Display all generic and brand names of medications available in the database with names ordered by generic names alphabetically.**

```
Select genericName, brandName from medicationInfo order  
by genericName asc;
```

**12. Display all medications used to treat high blood pressure available within the database.**

```
select * from hbpMedication;
```

**VIEW:**

```
CREATE VIEW hbpMedication AS  
select mi.genericName, mi.brandName from medicationInfo mi  
join medicationUseInfo mui  
on mi.medicationID=mui.medicationID where  
mui.medicationClass like 'Antihypertensive'
```