

## 1. Apparent Magnitude

```
SELECT TOP 20 comname, vmag FROM fk6.part1
ORDER BY vmag
```

## 2. Absolute Magnitude

```
SELECT TOP 20 comname,
5+5*LOG10(pres*3600)+vmag AS Mabs
FROM fk6.part1
ORDER BY vmag
```

## 3. Correction of a Corrupted Query

```
SELECT TOP 20 comname,
5+5*LOG10(pres*3600)+vmag AS Mabs
FROM fk6.part1
WHERE pres>0
ORDER BY vmag
```

## 4. Proper Motion (Element Grouping)

```
SELECT
  COUNT(*) AS n,
  ROUND(jmag) AS bin,
  AVG(pm) AS pmAvg
FROM lspm.main
GROUP BY bin
ORDER BY bin
```

## 5. Bibliographic Search (Join Tables #1)

```
SELECT
  TOP 100 measure_no, source_no, bibcode
FROM ohmaser.masers
JOIN ohmaser.bibrefs
  USING (refkey)
ORDER BY measure_no
```

## 6. Bibliographic Search (Join Tables #2)

```
SELECT
  TOP 100 name, hipno, rv, vrad
FROM rave.main AS rave
JOIN arihip.main AS ari
  ON 1=CONTAINS(
    POINT('', rave.raj2000, rave.dej2000),
    CIRCLE('', ari.raj2000, ari.dej2000, 1.5/3600.))
```