1

Select ASC(synonym)

Form external\_synonym

**Select \***

**From external\_synonym**

**Order by synonym**

2

Select count(synonym)

From external\_synonym

**Select count(distinct synonym)**

**From external\_synonym**

3

Select gene\_gene\_id, description

From external\_synonym

Where description like ‘%zinc finger%’

**Select \***

**From gene**

**Where instr(lower(description), ‘zinc\_finger’) >0**

4

Select avg(seq\_region\_end-seq\_region\_start)

From gene

**Select avg(seq\_region\_end-seq\_region\_start)**

**From gene**

5

Select count(strand)

From gene

Group by strand

6

Select synonym

From external\_synonym

Natural join gene

Where gen\_gen\_id = 192330

cursor.execute("Select gene\_id, biotype, seq\_region\_strand, description, synonym "  
 "from gene "  
 "join external\_synonym on (external\_synonym.xref\_id = gene.display\_xref\_id) "  
 "where gene\_id = 192330")

7

Select

From gene

Natural join external\_synonym

Where synonym is null

cursor.execute("select gene\_id, synonym from gene natural join external\_synonym where synonym is null")

8

Select biotype, count(??)

From gene

Group by biotype

Where description like ‘%iron%’ or description like ‘%magnesium%’

cursor.execute("Select biotype, *count*(\*) from gene where instr(*lower*(description), 'iron') or instr(*lower*(description), 'magnesium')")

9

Select gen\_id DESC, description, count(synonymen)

From external\_synonym

Natural join gene

Where count(synonymen)>17

cursor.execute("Select gene\_id, description, *count*(synonym) aantal\_synoniemen from gene join external\_synonym on (external\_synonym.xref\_id = gene.display\_xref\_id) group by gene\_id having *count*(synonym)>17 order by 3 desc")

10

Select \*

Form gene

Where max(seq\_region\_end-seq\_region\_start)

cursor.execute("select \* from exon where (seq\_region\_end-seq\_region\_start) = ( Select *max*(seq\_region\_end-seq\_region\_start) From exon)")