Laboratorio 2

**Aclaración:** Adjuntamos un archivo sql (labo2.sql) en la misma entrega con las 6 consultas.

## Consulta 1 en SQL:

select o.titulo, o.edicion, count( distinct ot.cod\_tema )

from obras as o natural join obra\_tema as ot

where o.pais = 'URY'

group by o.cod\_obra

having count( distinct ot.cod\_tema ) <= 3;

## 

## Consulta 2 en SQL:

Aclaracion: no se están considerando los repetidos

select a.cod\_autor, a.nombre\_autor

from autores as a

where not exists (select 1 from obra\_autor as oa natural join funciones as f

where oa.cod\_autor = a.cod\_autor and f.funcion <> 'autor')

and exists (select 1 from obra\_autor as oa

where oa.cod\_autor = a.cod\_autor);

## Consulta 2 en álgebra relacional:

Aclaración: ⨝ (natural join)

A = obra\_autor ⨝ ( 𝜎 funcion != ”autor” (funciones) ).

B = 𝚷cod\_autor(A).

C = 𝚷cod\_autor( autores ) - B.

𝚷cod\_autor, nombre\_autor( autores ⨝ C ).

## 

## Consulta 3 en SQL:

Aclaración: Exigimos que los autores tengan al menos una obra.

select a.nombre\_autor

from autores as a

where not exists (select 1 from obra\_autor oa join obra\_editorial oe on oe.cod\_obra = oa.cod\_obra

where oa.cod\_autor = a.cod\_autor

group by oa.cod\_obra

having count( distinct oe.cod\_editorial ) = 1)

and exists (select 1 from obra\_autor oa

where oa.cod\_autor = a.cod\_autor);

## Consulta 3 en cálculo relacional:

{t.nombre\_autor|autores(t) ^

(∀o)( obra\_autor(o) ^ t.cod\_autor = o.cod\_autor →

(∃x)(obra\_editorial(x) ^ o.cod\_obra = x.cod\_obra ^

(∃y)(obra\_editorial(y) ^ o.cod\_obra = y.cod\_obra ^

x.cod\_editorial != y.cod\_editorial ))) ^

(∃z)(obra\_autor(z) ^ t.cod\_autor = z.cod\_autor) }

## 

## Consulta 4 en SQL:

select o.titulo, o.isbn

from obras as o

natural join obra\_editorial as oe natural join obra\_autor as oa

group by o.cod\_obra

having count( distinct oe.cod\_editorial ) > count( distinct oa.cod\_autor );

## 

## Consulta 5 en SQL:

select e.cod\_editorial, e.nombre\_editorial

from obras as o natural join obra\_editorial as oe natural join editoriales as e

where o.edicion = '1a. ed'

group by e.cod\_editorial

having count( distinct o.cod\_obra ) >=

(select count(\*) from obras as o natural join obra\_editorial as oe

where o.edicion = '1a. ed'

group by oe.cod\_editorial

order by count(\*) desc

limit 1);

## 

## Consulta 6 en SQL:

select o.cod\_obra

from obras as o natural join obra\_autor as oa

where o.pais = 'ARG'

and 1 = (select count(\*) from obra\_autor oa2

where oa2.cod\_obra = oa.cod\_obra)

and 1 < (select count(\*) from obra\_autor oa2

where oa2.cod\_autor = oa.cod\_autor)

and (select count(\*) from obra\_autor oa2

where oa2.cod\_autor = oa.cod\_autor) =

(select count(\*) from obra\_tema ot2 natural join obra\_autor oa2

where oa2.cod\_autor = oa.cod\_autor

group by ot2.cod\_tema

order by count(\*) desc

limit 1);