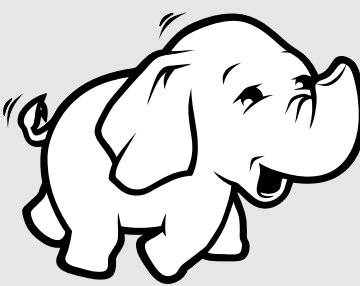


Problem

This is our first encounter with a database. What does it contain ?
How do we browse a large database ?

Querying

SQL 1999 

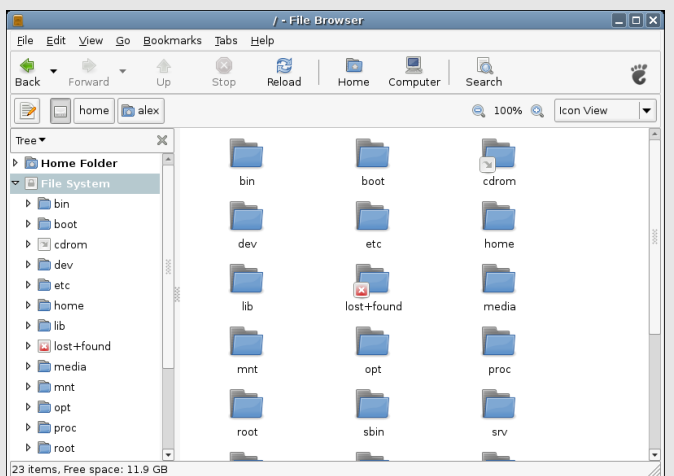
Incorrect queries return **pages of results**, or **nothing** at all

Data Mining

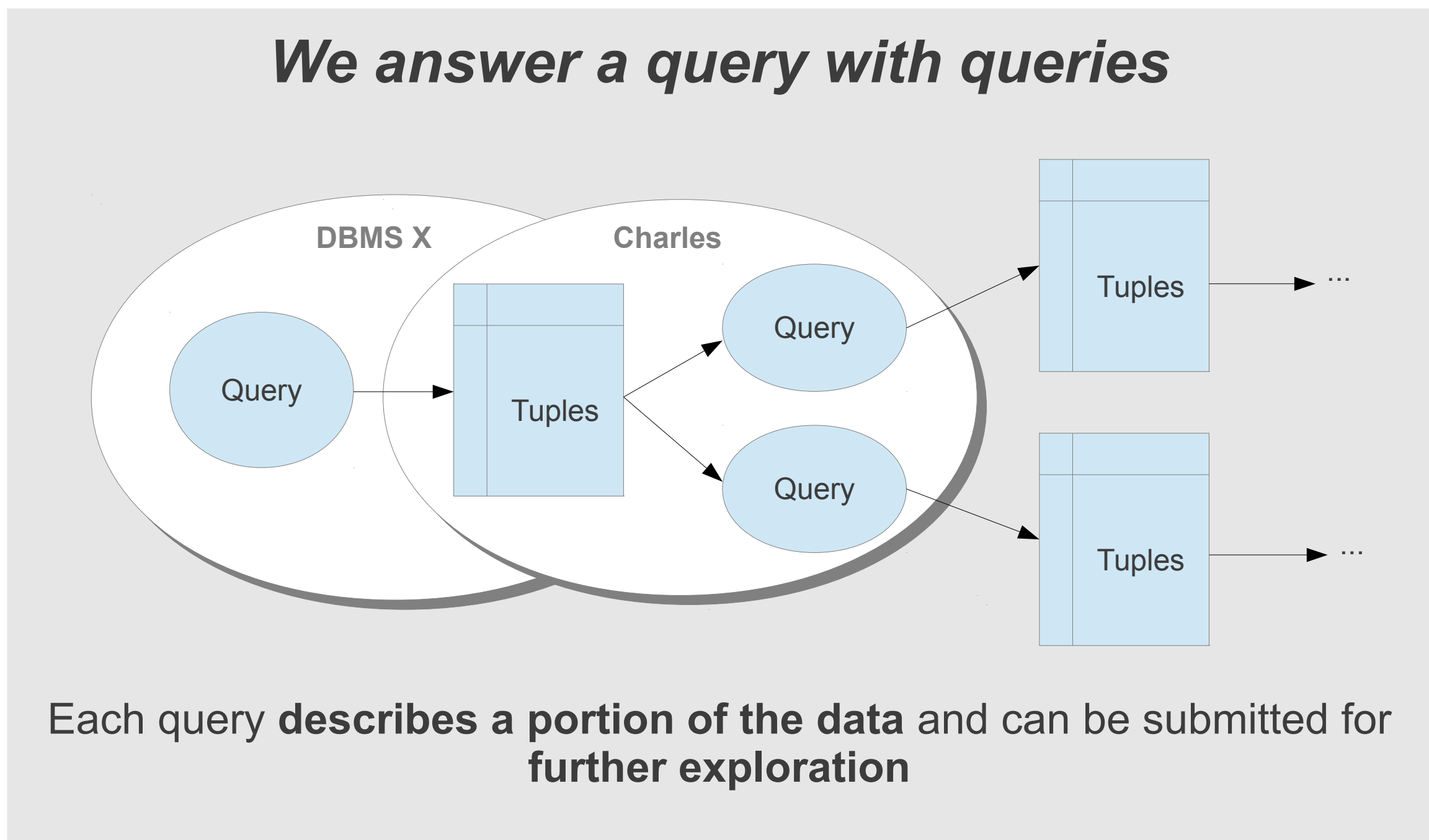
Requires **time, skills** and **knowledge of the data**

Our dream system



Instant exploration of the data

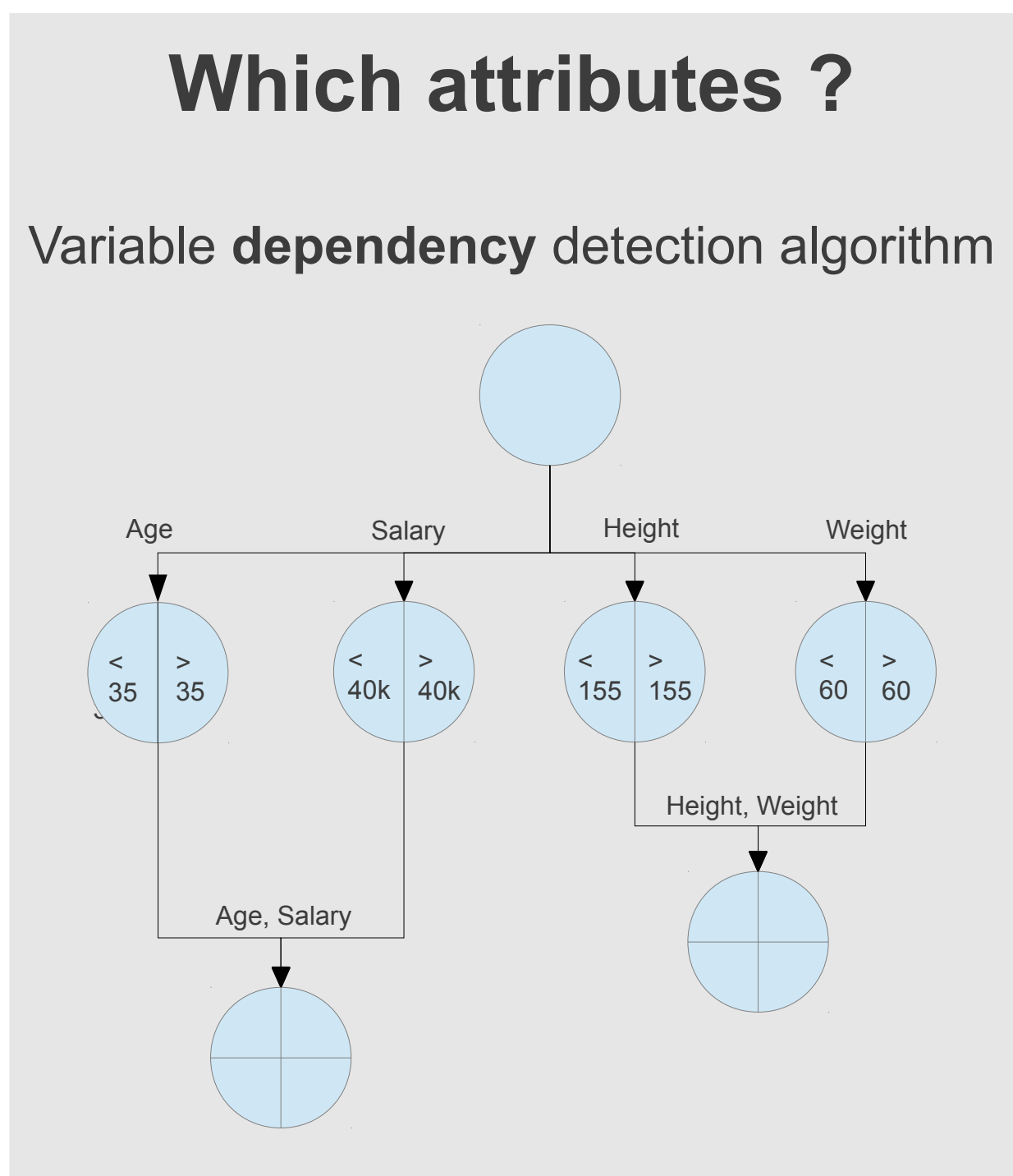
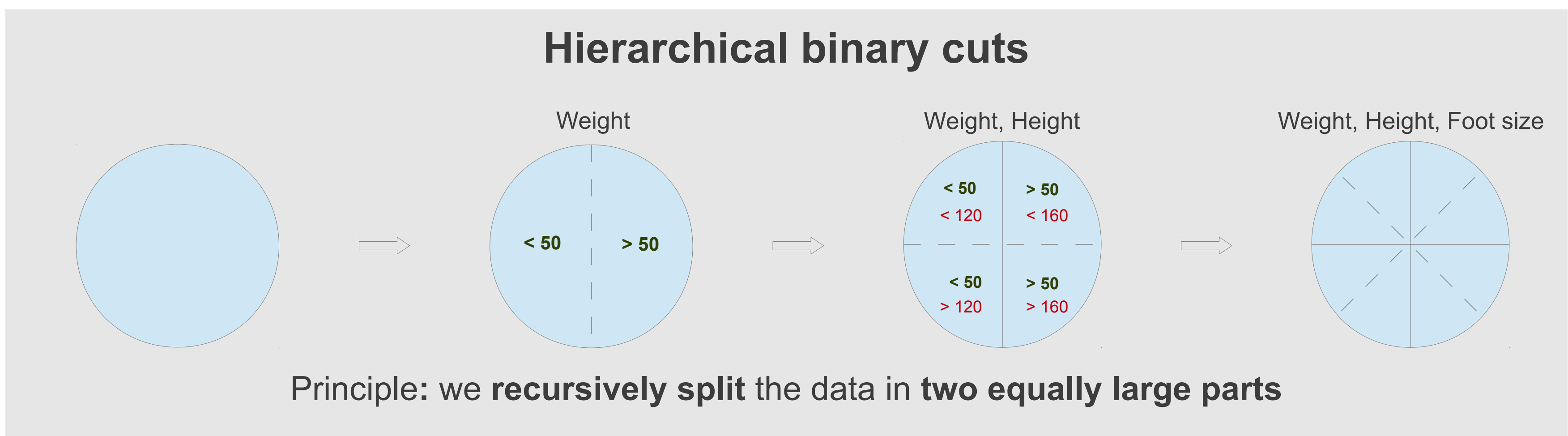
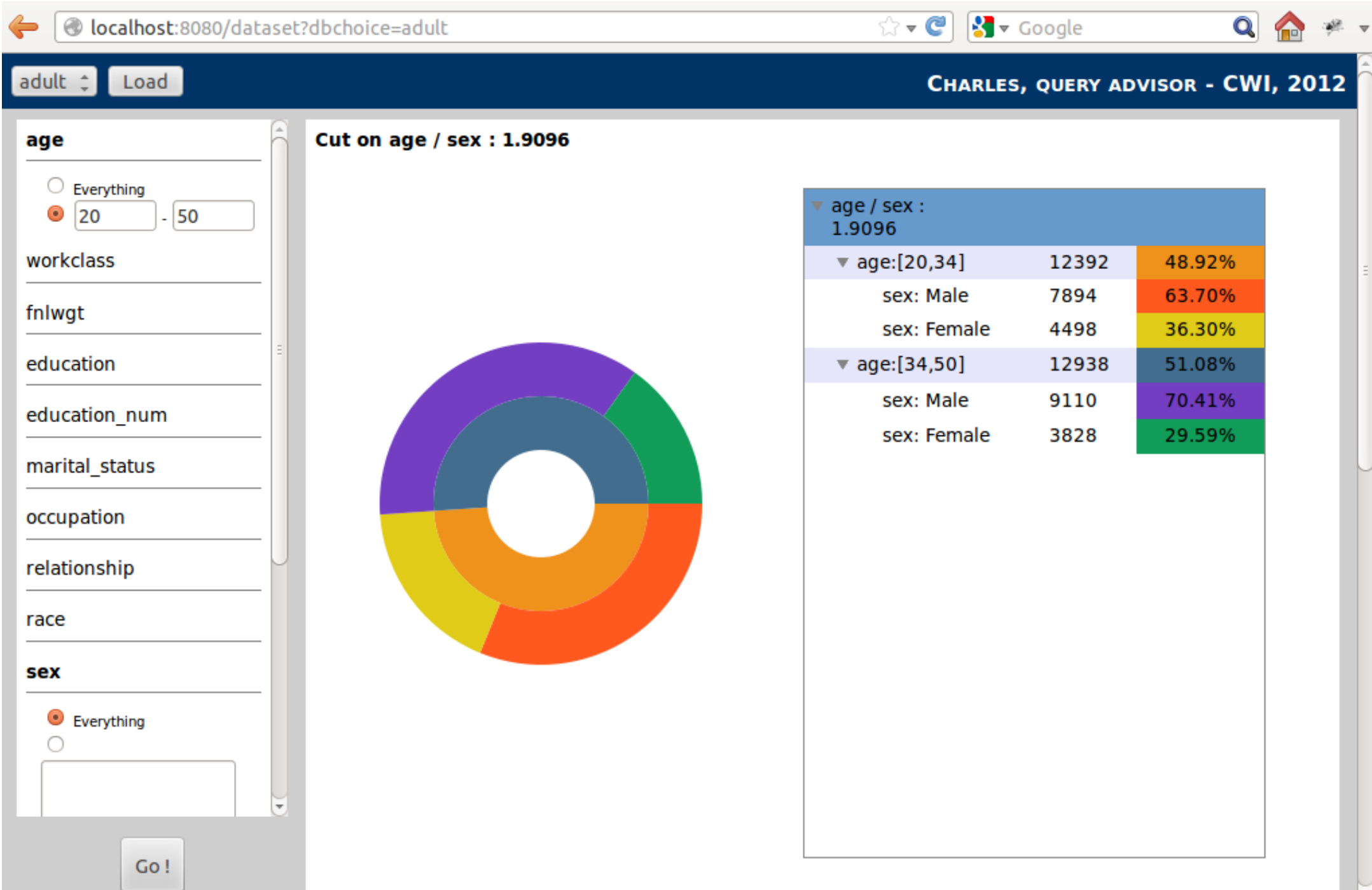
Approach



Good queries...

- ... are **meaningful**
 - They cover similar items
 - They are based on related attributes
- ... are **tractable**
 - Easy to read
 - Neither too specific nor too general
- ... appear in **real time**

Method

adult Load CHARLES, QUERY ADVISOR - CWI, 2012

age: [20, 50]

workclass

fnlwt

education

education_num

marital_status

occupation

relationship

race

sex

Go!

Cut on age / sex : 1.9096

age / sex : 1.9096			
age: [20,34]	12392	48.92%	
sex: Male	7894	63.70%	
sex: Female	4498	36.30%	
age: [34,50]	12938	51.08%	
sex: Male	9110	70.41%	
sex: Female	3828	29.59%	