Comp 421 – Assignment 2

# Question 1

Postgresql script

ass2q1.sql

# Question2

## Question 2.1

|  |
| --- |
| <!DOCTYPE POLITICIANS [ <!ELEMENT POLITICAN (CURRENTMAYOR|CURRENTMOP+)>  <!ATTLIST POLITICIAN PNAME ID #REQUIRED  WEBSITE CDATA #IMPLIED  ADDRESS CDATA #IMPLIED  FRIEND IDREFS #IMPLIED>  <!ELEMENT CURRENTMAYOR (CITY+)> <!ELEMENT CITY (PROVINCES+)>  <!ATTLIST CITY NAME ID #REQUIRED  POPULATION CDATA #IMPLIED>  <!ELEMENT CURRENTMOP (RIDING+)>  <!ATTLIST CURRENTMOP SINCE CDATA #IMPLIED>  <!ELEMENT RIDING (PROVINCES+)>  <!ATTLIST RIDING RNAME ID #REQUIRED  POPULATION CDATA #IMPLIED>  <!ELEMENT PROVINCES (#PCDATA)> <!ATTLIST PROVINCES PNAME ID # REQUIRED  POPULATION CDATA #IMPLIED>  ]> |

## Question 2.2

|  |
| --- |
| <POLITICIANS>  <POLITICIAN pname = "Coderre" website = http://www.equipedeniscoderre.com friend = "Mulcair">  <CURRENTMAYOR>  <CITY>Montreal</CITY>  </CURRENTMAYOR>  </POLITICIAN>  <POLITICIAN pname = "Mulcair" website = " http://thomasmulcair.ndp.ca/" friend = "Coderre">  <CURRENTMOP>  <RIDING>Montreal Outremont</RIDING>  </CURRENTMOP>  </POLITICIAN>  <CITY name = "Montreal" population = "1.6 Mio">  <PROVINCE>Quebec</PROVINCE>  </CITY>  <RIDING rname = "Montreal Outremont" population = "98,000">  <PROVINCE>Quebec</PROVINCE>  </RIDING>  </POLITICIANS> |

## Question 2.3

a- for $x in /POLITICIANS/POLITICIAN/CURRENTMAYOR/PNAME

return $x

b- for $x in /POLITICIANS/POLITICIAN/CURRENTMOP(PROVINCE = "Quebec")/PNAME

return $x

c- let $a = /POLITICIANS/POLITICAN/CURRENTMAYOR/CITY/PROVINCE[max(count(CITY))]

for $b in /POLITICIANS/POLITICAN/CURRENTMAYOR/CITY/PROVINCE/PNAME

where $b/PROVINCE[count(CITY)] = $a

return $b

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