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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>
 ]>
```

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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
        z
```