Today's class: XPath, XQuery; Ch. 12.
Next class: catch-up, review.

1. List the members of your group below. Underline your name.

2. Consider an XML database suggested by the following excerpt of a file `ferndb.xml`:

```
<FernDB>                                             <Habitat id="woods">
  <Fern>                                               Woodland areas.
    <CommonName lang="en">Ostrich Fern</CommonName>  </Habitat>
    <BinomialName>                                   <Observation>
      <Genus>Matteuccia</Genus>                        <Date format="ISO">2012-06-01</Date>
      <Species>struthiopteris</Species>               <Location>near shed</Location>
    </BinomialName>                                    <Fern>Ostrich Fern</Fern>
    <HeightLow units="ft">2</HeightLow>              </Observation>
    <HeightUp units="ft">5</HeightUp>              </FernDB>
    <Habitats>
      <Habitat id="woods"/>
    </Habitats>
    <FruitDate>
      <Month lang="en">June</Month>
      <Day>5</Day>
    </FruitDate>
  </Fern>
```

   Write XPath queries for:

   (a) Common names of all ferns.

   (b) Binomial names of all ferns that fruit in June.

   (c) Common names of ferns in a "woods" habitat and a height consistent with 3 ft.

   (d) The first fern of the third observation.

   (e) Dates of observations with three or more ferns.

3. With the database of Question 2, write XQuery queries for:

   (a) A sorted list of all observation dates.

   (b) A list, sorted by dates, of observation dates and locations (only).

   (c) The binomial names of all ferns observed "near shed."

   (d) The common and binomial names of ferns that are listed in all observations "near shed."

   (e) The common and binomial names of ferns that are listed in all observations "near shed" in the year 2012.