

Today's class: XQuery, catch-up, review.

Next class: Midterm Exam 2.

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`:

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

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.

3. Provide triggers that are equivalent to the constraint *c1*:

```
alter table R add constraint c1 foreign key (A, B)
references S(D, B);
```