Computer Science 134
Introduction to Computer Science, in Python
HW Solutions HW 4 (Spring 2020)

Below are some of the preferred answers for Homework 4.

1. **Question 1 (1pt):** `dateTup = (dateTup[0],) + (9,) + (dateTup[1],)`. Parentheses are optional, the 3 commas are not. `dateTup = (dateTup[0],day,dateTup[1])` is also correct, but you should also understand the first answer.

2. **Question 2 (1pt):** `colName, foundYear,colState = collegeInfo`. There might be other options, but focus on "simpler or more elegant".

3. **Question 3 (2pt):** `None` will be stored in `bugDates` because append returns `None`. (Or some comparable explanation).

4. **Question 4 (2pt):** Use `.get(..)`, it's useful and important! No conditionals.

   ```python
   def processZip(zipCodes):
       oldZip = zipCodes.get('home', '01267')
       zipCodes['home'] = '01267'
       return oldZip
   ```

5. **Question 5 (2pt):** `firstData = [course.split()[0] for course in courseInfo.split(',')]`
   It's also okay to use `strip()` (although it's not necessary for the first words, just anything after that!):
   `firstData = [course.split()[0].strip() for course in courseInfo.split(',')]`

6. **Question 6a (1pt):** `byType = sorted(fruitData, key=lambda x:  x[0])`
   OR `byType = sorted(fruitData)`

7. **Question 6b (1pt):** `byType = sorted(fruitData, key=lambda x:  (x[2], x[1]))`