

# Using Inheritance

- Let's build an application that organizes info about people!
  - Person: name, birthday
    - Get last name
    - Sort by last name
    - Get age

## How `list.sort()` works

- Python uses the timsort algorithm for sorting sequences – a highly-optimized combination of merge and insertion sorts that has very good average case performance
- The only knowledge needed about the objects being sorted is the result of a “less than” comparison between two objects
- Python interpreter translates `obj1 < obj2` into a method call on `obj1` → `obj1.__lt__(obj2)`
- To enable sort operations on instances of a class, implement the `__lt__` special method.
- Note: See section 3.4 of the Python Language Reference for a list of other special methods