CS61A – Lab Assignment 4.1 **Kurt Meinz**
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1. Modify the `person` class given in the lecture notes for week 3 (it's in the file `demo2.scm` in the `~cs61a/lectures/3.0` directory) to add a `repeat` method, which repeats the last thing said. Here's an example of responses to the `repeat` message.

```
> (define brian (instantiate person 'brian))
brian
> (ask brian 'repeat)
()
> (ask brian 'say '(hello))
(hello)
> (ask brian 'repeat)
(hello)
> (ask brian 'greet)
(hello my name is brian)
> (ask brian 'repeat)
(hello my name is brian)
> (ask brian 'ask '(close the door))
(would you please close the door)
> (ask brian 'repeat)
(would you please close the door)
```

2. This exercise introduces you to the `usual` procedure described on page 9 of "Object-oriented Programming – Above-the-line View". Read about `usual` there to prepare for lab. Suppose that we want to define a class called `double-talker` to represent people that always say things twice, for example as in the following dialog.

```
> (define mike (instantiate double-talker 'mike))
mike
> (ask mike 'say '(hello))
(hello hello)
> (ask mike 'say '(the sky is falling))
(the sky is falling the sky is falling)
```

Consider the following three definitions for the `double-talker` class. (They can be found online in the file `~cs61a/lib/double-talker.scm`.)

```
(define-class (double-talker name)
  (parent (person name))
  (method (say stuff) (se (usual 'say stuff) (ask self 'repeat))) )

(define-class (double-talker name)
  (parent (person name))
  (method (say stuff) (se stuff stuff)) )

(define-class (double-talker name)
  (parent (person name))
  (method (say stuff) (usual 'say (se stuff stuff))) )
```

Determine which of these definitions work as intended. Determine also for which messages the three versions would respond differently.