9.6.1 Arrays as Objects

If the user of your class honors the contract and sticks to the advertised interface, then you can change its underlying interface if you feel like it. Here's another implementation that conforms to the same interface specification. This time we'll use an array reference instead of a hash reference to represent the object.

```
package Person;
use strict;

my($NAME, $AGE, $PEERS) = ( 0 .. 2 );

##########################################
## the object constructor (array version) ##
##########################################
sub new {
    my $self = [];
    $self->[$NAME]   = undef;  # this is unnecessary
    $self->[$AGE]    = undef;  # as is this
    $self->[$PEERS]  = [];     # but this isn't, really
    bless($self);
    return $self;
}

sub name {
    my $self = shift;
    if (@_) { $self->[$NAME] = shift }
    return $self->[$NAME];
}

sub age {
    my $self = shift;
    if (@_) { $self->[$AGE] = shift }
    return $self->[$AGE];
}

sub peers {
    my $self = shift;
    if (@_) { @{ $self->[$PEERS] } = @_ }
    return @{ $self->[$PEERS] };
}

1;  # so the require or use succeeds
```

You might guess that the array access would be a lot faster than the hash access, but they're actually comparable. The array is a *little* bit faster, but not more than ten or fifteen percent, even when you replace the variables above like $AGE with literal numbers, like 1. A bigger difference between the two approaches can be found in memory use. A hash representation takes up more memory than an array representation because you have to allocate memory for the keys as well as for the values. However, it really isn't that bad, especially since as of version 5.004, memory is only allocated once for a given hash key, no matter how many hashes have that key. It's expected that sometime in the future, even these differences will fade into obscurity as more efficient underlying representations are devised.

Still, the tiny edge in speed (and somewhat larger one in memory) is enough to make some programmers choose an array representation for simple classes. There's still a little problem with scalability, though, because later in life when you feel like creating subclasses, you'll find that hashes just work out better.