Filtering with Iterators

Debug Session

Marcus Börger

php quebec 2005

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
     parent::__construct($it); }
   function accept() {
     return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
     $this->ar = $ar; }
   function rewind() {
     reset($this->ar); }
   function valid() {
     return !is_null(key($this->ar)); }
   function current() {
     return current($this->ar); }
   function key() {
     return key($this->ar); }
   function next() {
     next($this->ar); }
}
?>
```

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

```
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
   echo "$key => $val\n";
}
?>
```

```
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

Debug Session

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

```
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

```
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
   echo "$key => $val\n";
}
?>
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
     parent::__construct($it); }
   function accept() {
     return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
     $this->ar = $ar; }
   function rewind() {
     reset($this->ar); }
   function valid() {
     return !is_null(key($this->ar)); }
   function current() {
     return current($this->ar); }
   function key() {
     return key($this->ar); }
   function next() {
     next($this->ar); }
}
?>
```

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

Debug Session

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
   echo "$key => $val\n";
}
?>
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
     parent::__construct($it); }
   function accept() {
     return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
     $this->ar = $ar; }
   function rewind() {
     reset($this->ar); }
   function valid() {
     return !is_null(key($this->ar)); }
   function current() {
     return current($this->ar); }
   function key() {
     return key($this->ar); }
   function next() {
     next($this->ar); }
}
?>
```

Debug Session

```
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
     parent::__construct($it); }
   function accept() {
     return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
     $this->ar = $ar; }
   function rewind() {
     reset($this->ar); }
   function valid() {
     return !is_null(key($this->ar)); }
   function current() {
     return current($this->ar); }
   function key() {
     return key($this->ar); }
   function next() {
     next($this->ar); }
}
?>
```

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

Debug Session

```
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
     parent::__construct($it); }
   function accept() {
     return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
     $this->ar = $ar; }
   function rewind() {
     reset($this->ar); }
   function valid() {
     return !is_null(key($this->ar)); }
   function current() {
     return current($this->ar); }
   function key() {
     return key($this->ar); }
   function next() {
     next($this->ar); }
}
?>
```

```
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

Debug Session

```
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
1 => 2
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

```
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
1 => 2
```

```
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
1 => 2
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

Debug Session

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
1 => 2
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

Debug Session

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
1 => 2
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

Debug Session

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
1 => 2
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

Debug Session

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
1 => 2
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

Debug Session

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
   echo "$key => $val\n";
}
?>
```

```
1 => 2
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
     parent::__construct($it); }
   function accept() {
     return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
     $this->ar = $ar; }
   function rewind() {
     reset($this->ar); }
   function valid() {
     return !is_null(key($this->ar)); }
   function current() {
     return current($this->ar); }
   function key() {
     return key($this->ar); }
   function next() {
     next($this->ar); }
}
?>
```

```
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
1 => 2
```

```
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
1 => 2
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

```
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
1 => 2
```

```
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

```
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
1 => 2
```

```
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

Debug Session

```
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
   echo "$key => $val\n";
}
?>
```

```
1 => 2
```

```
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
     parent::__construct($it); }
   function accept() {
     return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
     $this->ar = $ar; }
   function rewind() {
     reset($this->ar); }
   function valid() {
     return !is_null(key($this->ar)); }
   function current() {
     return current($this->ar); }
   function key() {
     return key($this->ar); }
   function next() {
     next($this->ar); }
}
?>
```

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
1 => 2
3 => 8
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

```
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
   echo "$key => $val\n";
}
?>
```

```
1 => 2
3 => 8
```

```
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
     parent::__construct($it); }
   function accept() {
     return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
     $this->ar = $ar; }
   function rewind() {
     reset($this->ar); }
   function valid() {
     return !is_null(key($this->ar)); }
   function current() {
     return current($this->ar); }
   function key() {
     return key($this->ar); }
   function next() {
     next($this->ar); }
}
?>
```

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
   echo "$key => $val\n";
}
?>
```

```
1 => 2
3 => 8
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
   echo "$key => $val\n";
}
?>
```

```
1 => 2
3 => 8
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
     parent::__construct($it); }
   function accept() {
     return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
     $this->ar = $ar; }
   function rewind() {
     reset($this->ar); }
   function valid() {
     return !is_null(key($this->ar)); }
   function current() {
     return current($this->ar); }
   function key() {
     return key($this->ar); }
   function next() {
     next($this->ar); }
}
?>
```

Debug Session

```php
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
   echo "$key => $val\n";
}
?>
```

```
1 => 2
3 => 8
```

```php
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```

Debug Session

```
<?php
$a = array(1,2,5,8);
$i = new EvenFilter(new MyIterator($a));
foreach($i as $key => $val) {
    echo "$key => $val\n";
}
?>
```

```
1 => 2
3 => 8
```

```
<?php
class EvenFilter extends FilterIterator {
   function __construct(Iterator $it) {
      parent::__construct($it); }
   function accept() {
      return $this->current() % 2 == 0; }
}
class MyIterator implements Iterator {
   function __construct($ar) {
      $this->ar = $ar; }
   function rewind() {
      reset($this->ar); }
   function valid() {
      return !is_null(key($this->ar)); }
   function current() {
      return current($this->ar); }
   function key() {
      return key($this->ar); }
   function next() {
      next($this->ar); }
}
?>
```