



# Generator expressions

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# Comprehension-like syntax



(mandatory) parens instead of brackets

`(key.toUpperCase() for (key in obj))`

# Similar desugaring



```
(function() {  
  for (let key in obj) {  
    yield key.toUpperCase();  
  }  
})();
```

# Example: Norvig's Sudoku solver



```
function all(seq) {  
  for (let e in seq) {  
    if (!e)  
      return false;  
  }  
  return true;  
}
```

short-circuit the computation

extra parens not required in function call

```
if (all((eliminate(values, s, d2)  
  for (d2 in values[s])  
  if (d2 !== d))))  
  return values;
```

# Summary



- Again, simple syntactic sugar, conceptually consistent.
- Makes lazy streams short and sweet to express.
- Symmetry with comprehensions (syntactic and semantic).
- Gentle refactoring path between eager and lazy.