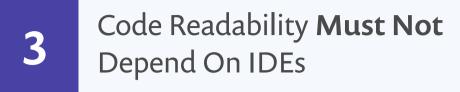


### THREE CODING PRINCIPLES







### **SEVEN CODING GUIDELINES**

## 1. Choose good variable names.

```
Before:
List<Customer> x = dbconn.executeQuery(query);
With var:
 var custList = dbconn.executeQuery(query);
                                                   X
 var x = dbconn.executeQuery(query);
```

## 2. Minimize local variable scope.

```
X
var items = new HashSet<Item>(...);
// ... 100 lines of code ...
for (var item : items) ...
```

## 3. Use good initializer information.

#### **Before:**

```
ByteArrayOutputStream outputStream =
              new ByteArrayOutputStream();
```

#### With var:

```
var outputStream = new
              ByteArrayOutputStream();
var reader = fetch();
                                                 X
```

# 4. Break up chained expressions in logical places.

Before: (Verbose type names lead to no interim vars, and reduced readability)

```
return strings.stream()
          .collect(groupingBy(...)
          .entrySet()
          .stream()
          .max(...)
          .map(...);
```

#### With var:

```
V
var freqMap = strings.stream()
                     .collect(...);
var maxEntryOpt = freqMap.entrySet()
                  .stream()
                 .max(...);
return maxEntryOpt.map(...);
```

## 5. Don't worry about "programming to the interface" with vars.

#### **Before:**

```
List<String> list = new ArrayList<>();
With var:
  // ArrayList<String> is inferred
  var list = new ArrayList<String>();
```

# 6. Take care with <> or generic methods.

#### **Before:**

```
PriorityQueue<Item> itemQueue =
                 new PriorityQueue<>();
```

#### With var:

```
// PriorityQueue<Item> is inferred
var itemQueue = new PriorityQueue<Item>();
```

```
// PriorityQueue<Object> is inferred
var itemQueue = new PriorityQueue<>();
```

### 7. Take care with literals.

long base = 17;

#### **Before:** Infered type, with var:

```
boolean ready = true;
                                    boolean
char ch = '\ufffd';
                                     char
long sum = 0L;
                                     long
String label = "wombat";
                                    String
                              X
byte flags = 0;
                                     (int)
                              X
short mask = 0x7fff;
                                     (int)
```



X

(int)