```
var x = 1;
var x: number;
if (x == 1) {
    var x = 2;
}
```

In the following example, all five variables are of the same type, '{ x: number; y: number; }'.

```
interface Point { x: number; y: number; }

var a = { x: 0, y: <number> undefined };

var b: Point = { x: 0; y: undefined };

var c = <Point> { x: 0, y: undefined };

var d: { x: number; y: number; } = { x: 0, y: undefined };

var e = <{ x: number; y: number; }> { x: 0, y: undefined };
```

## 5.2 If, Do, and While Statements

Expressions controlling 'if', 'do', and 'while' statements can be of any type (and not just type Boolean).

## 5.3 For Statements

Variable declarations in 'for' statements are extended in the same manner as variable declarations in variable statements (section 5.1).

## 5.4 For-In Statements

In a 'for-in' statement of the form

```
for (Var in Expr) Statement
```

Var must be an expression classified as a reference of type Any or the String primitive type, and Expr must be an expression of type Any, an object type, or a type parameter type.

In a 'for-in' statement of the form

```
for (var VarDecl in Expr) Statement
```

*VarDecl* must be a variable declaration without a type annotation that declares a variable of type Any, and *Expr* must be an expression of type Any, an object type, or a type parameter type.

## 5.5 Continue Statements

A 'continue' statement is required to be nested, directly or indirectly (but not crossing function boundaries), within an iteration ('do', 'while', 'for', or 'for-in') statement. When a 'continue' statement includes a target label, that target label must appear in the label set of an enclosing (but not crossing function boundaries) iteration statement.