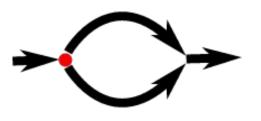
JavaScript II

Control Flow

Control Flow

Straight Control Flow: in sequence

Control Flow



Conditional execution

You can add omit braces { } (these indicate *blocks*) if there is only one line in the code you want to run.

```
var theNumber = Number(prompt("Pick a number", ""));
if (!isNaN(theNumber))}{
   alert("Your number is the square root of " +
        theNumber * theNumber);
}
```



Conditional Execution with else



Multiple Conditions:

```
var num = Number(prompt("Pick a number", "0"));
if (num < 10)
   alert("Small");
else if (num < 100)
   alert("Medium");
else
   alert("Large");</pre>
```



• While loops:

```
var number = 0;
while (number <= 12) {
  console.log(number);
  number = number + 2;
}
// → 0
// → 2
// ... etcetera</pre>
```



Another while loop example:

```
var result = 1;
var counter = 0;
while (counter < 10) {
  result = result * 2;
  counter = counter + 1;
}
console.log(result);
// → 1024</pre>
```



• Do...While loop:

```
do {
  var yourName = prompt("Who are you?");
} while (!yourName);
console.log(yourName);
```



• For loop:

```
for (var number = 0; number <= 12; number = number + 2)
  console.log(number);
// → 0
// → 2
// ... etcetera</pre>
```



- Breaking out of a loop: use break;
- Go to next iteration: use continue;

```
for (var current = 20; ; current++) {
  if (current % 7 == 0)
    break;
}
console.log(current);
// → 21
```

Switches:

```
switch (prompt("What is the weather like?")) {
  case "rainy":
    console.log("Remember to bring an umbrella.");
    break;
  case "sunny":
    console.log("Dress lightly.");
  case "cloudy":
    console.log("Go outside.");
    break;
  default:|
    console.log("Unknown weather type!");
    break;
}
```

Updating Variables Succinctly

```
Shorthand updates:
    counter = counter + 1;
    is the same as
    counter += 1;
```

- The same goes for -, *, /
- Increments and decrements:

```
counter++, counter--
```

Comments

- Same as Java, two forward slashes (//)
- Multiline: (/**/)

```
var accountBalance = calculateBalance(account);
// It's a green hollow where a river sings
/*
   I first found this number scrawled on the back of one of
   my notebooks a few years ago. Since then, it has often
   dropped by, showing up in phone numbers and the serial
   numbers of products that I've bought. It obviously likes
   me, so I've decided to keep it.
   */
   var myNumber = 11213;
```