

JAVASCRIPT: CONDITIONALS AND LOOPS

ANATOMY OF AN IF STATEMENT

THE CONDITIONAL EXPRESSION (APPLE < 10) IS EVALUATED. IF IT IS TRUE, THE BLOCK WITHIN THE CONDITIONAL EXPRESSION { ... } IS EXECUTED. IF IT IS FALSE, THE INTERPRETER MOVES TO THE NEXT STATEMENT.

```
var apple = 9;  
if(apple < 10) {  
    console.log("red");  
}
```

IF STATEMENTS (CONTINUED)

THE `else` KEYWORD, IF PRESENT, WILL BE EXECUTED IF THE CONDITIONAL EXPRESSION IN THE IF STATEMENT IS FALSE.

```
var apple = 15;  
if(apple < 10) {  
    console.log("red");  
} else {  
    console.log("green");  
}
```

CHAINING IF STATEMENTS

THE `else if` KEYWORD CAN BE USED TO TEST MULTIPLE CONDITIONS.

```
var apple = 25;  
if(apple < 10) {  
    console.log("red");  
} else if(apple < 20) {  
    console.log("green");  
} else {  
    console.log("yellow");  
}
```

EXERCISE

```
var elephant = 7;
if(elephant === 8) {
    console.log("peanuts");
} else if(elephant === 7) {
    console.log("bananas");
} else {
    console.log("turnips");
}
```

EXERCISE 2

```
var bear = 3;  
if(bear < 2) {  
    console.log("brown");  
} else if(bear > 2) {  
    console.log("black");  
} else {  
    console.log("polar");  
}
```

ANATOMY OF A WHILE LOOP

A WHILE LOOP IS AKIN TO A REPEATING IF STATEMENT. THE CONDITIONAL EXPRESSION IS EVALUATED, AND IF THE EXPRESSION IS TRUE, THE CODE WITHIN THE BLOCK IS EXECUTED. THIS REPEATS UNTIL THE CONDITION/EXPRESSION BECOMES FALSE.

```
var counter = 0;
while(counter < 10) {
    console.log("hello!");
    counter = counter + 1;
}
```

EXERCISE

```
var chair = 10;  
while(chair > 5) {  
    console.log("cushion");  
    chair = chair - 2;  
}
```


EXERCISE 2

```
var sandal = 1;
while(sandal < 7) {
    console.log("flip flop");
    sandal = sandal * 2;
}
```

EXERCISE 3

```
var wiggles = 0;
var squiggles = 0;
while(wiggles < 3) {
    squiggles = squiggles + 1;
    if(squiggles > 4) {
        wiggles = 6;
    }

    console.log("merry-go-round");
}
```

EXERCISE 4

USING A LOOP, PRINT OUT YOUR FIRST NAME SIX TIMES.

ANATOMY OF A FOR LOOP

```
for(var x = 0; x < 10; x = x + 1) {  
    console.log("hello!");  
}
```

VS

```
var counter = 0;  
while(counter < 10) {  
    console.log("hello!");  
    counter = counter + 1;  
}
```

EXERCISE 5

TAKE YOUR PREVIOUS LOOP, AND MAKE IT INTO A FOR LOOP.