

Data Types

String: `'hey', '9/11', 'j fole'`

Int: `2, 12, 109`

Boolean: `true or false`

Variable Declaration

```
let x;
```

```
const y;
```

Variable Initialization

```
x = 2;
```

```
y = 'Hello';
```

Variable Declaration + Initialization

```
let x = 2;
```

```
const y = 'Hello';
```

if/else conditional

```
if (condition) {  
    // code  
} else {  
    //code  
}
```

```
let x = 2;
```

```
if ( x > 1 ) {  
    console.log('x is greater than 1');  
} else {  
    console.log('x is less than 1');  
}
```

```
// output: 'x is greater than 1'
```

(if statements also don't have to have an else statement)

if else statements can contain multiple expressions in one condition using the `||` or `&&` operator

`||` means “or” so if at least one of the expressions is true than the condition is true

`&&` means “and” so all conditions have to be true for the condition to be true

|| example:

```
let x = 10;
```

```
if (x == 10 || x == 9) {  
    console.log('x is 10 or 9');  
}
```

// output 'x is 10 or 9'

// x isn't 9 but it is 10, so it at least makes one of the conditions true making the whole condition true

&& example

```
let x = 30;
```

```
if (x > 1 && x < 20) {  
    console.log('x is in between 1 and 20');  
} else {  
    console.log('x is not in between 1 and 20');  
}
```

// output is 'x is in between 1 and 20'

// x is bigger than 1, but not less than 20 so the whole condition is false

else if structure

```
if (condition) {  
    // code  
} else if (condition) {  
    // code  
} else {  
    // code  
}
```

(You can chain multiple else if statements)

```
let x = 5;
```

```
if (x < 5) {  
    console.log('x is less than 5');  
} else if (x == 5) {  
    console.log('x is 5');  
} else {  
    console.log('x is greater than 5');  
}
```

switch statement

You want to use this one if you have a lot of specific conditions to check for

```
switch (variable) {  
    case "example case":  
        // code  
        break;  
    case "example case 2":  
        // code  
        break;  
    case "example case 3":  
        // code  
        break;  
    default:  
        // code for error  
}
```

Example on next page ->

```
let day = 'wednesday';
let message;

switch (day) {
  case "monday":
    message = "Start of the work week!";
    break;
  case "tuesday":
    message = "It's Tuesday.";
    break;
  case "wednesday":
    message = "Hump Day.";
    break;
  case "thursday":
    message = "Almost there!";
    break;
  case "friday":
    message = "Friday!";
    break;
  case "saturday":
    message = "Weekend! Time to relax!";
    break;
  case "sunday":
    message = "God's day!";
    break;
  default:
    message = "Invalid day of the week";
}

console.log(message); // output is "Hump Day."
```

Loops

for loop:

```
for(<starting point>, <# of iterations>,  
<increment by>) {  
  
}
```

```
for (let i = 0; i < 5; i++) {  
    // start at 0  
    // goes to 5  
    // i goes up by 1 every iteration  
}
```

```
for (let i = 0; i < 5; i++) {  
    console.log(i);  
}
```

Output:

```
0  
1  
2  
3  
4
```

while loop:

```
while(condition) {  
  
}
```

```
let count = 0;  
while(count < 5) {  
    console.log('ur mom');  
    count++;  
}
```

Output:

```
ur mom  
ur mom  
ur mom  
ur mom  
ur mom
```