

Conditionals

- Used when a decision must be made between one or more possibilities (conditions)
- Basic conditional
 - if (<T/F Statement>) {
 <code statements>;
}
- General conditional
 - if (<T/F Statement>) {
 <code statements>; // tests for one condition: true
}
 - else {
 <code statements>; // the other for False (or otherwise)
}

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Conditionals

- Multiple conditions to check....
 - if (<T/F Statement>) {
 <code statements>; // tests for multiple conditions
}
 - else if (<T/F Statement>) {
 <code statements>;
}
 - else if (<T/F Statement>) {
 <code statements>;
}
 -
 - else {
 <code statements>; // if none of previous are true, do
 // otherwise
}

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What writes to the screen?

```
var number = 4;
if (number > 0) {
    document.write("Number is a positive integer");
}
else if (number < 0) {
    document.write("Number is a negative integer");
}
else {
    document.write("Number is 0");
}
```

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But, what if....?

- What does this print?

```
var x ;
x=10;
if (x > 1) {
    document.write("Wassup!");
}
else if (x > 2) {
    document.write( "Dude");
}
else {
    document.write( "Mariners");
}
document.write("The End");
```

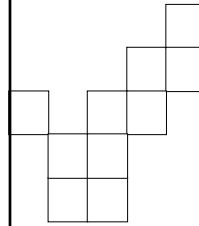
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Let's Move From Theory to Practice!

- We want to write a program that takes an integer as input and outputs whether or not the result is a positive number or negative number
 - How should we get the user's input?
 - How do we tell if the input is positive or negative?
 - How should we output the "positive" or "negative" evaluation to the user?
 - Be Creative!

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Design on Paper!

How well do you understand the idea of conditionals?

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Working Away from the Computer

- Form teams of 8-10
- You are creating a program using HTML and JavaScript.
- There are 2 parts to the design:
 - Part I: Create a program that will allow a user to enter in the outside temperature. The computer will respond with an opinion about it. There will be 3 opinions:
 - Too cold!
 - Just right!
 - Too damned hot!
 - Part II (if there is time): Add statements that will convert the Fahrenheit temperature give to Celsius and display the result

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Working Away from the Computer

- Start by drawing a simple interface that will:
 - Give instructions
 - Take user input
 - Allow the input to be used when the user clicks or submits to the program
 - Give a response to the user
- Name all objects used in your form!!!!

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Working Away from the Computer

- Where is the most logical place to add code statements that will:
 - Take the user input and compare it to see if it is over 80, under 60, or somewhere in-between?

 - Convert the temperature the user enters into Celsius and display it?
 - The formula to convert Fahrenheit to Celsius is:
$$C = (5/9) * (F - 32)$$

 - Reset the form?