**JavaScript**

**Review: *if Statements***

* Parts of an *if statement*:  
    
  keyword conditional expression (“condition”)  
   | |  
  if(degrees < 45)   
   alert("wear a coat"); --- statement to be executed if the *condition* is true
* Types of if statements:
* Single branch   
  if(degrees < 45)   
   alert("wear a coat");
* Multiple branches  
  if(degrees < 32)   
   alert("wear a warm coat");  
  else if (degrees < 45)  
   alert("wear a jacket");  
  else  
   alert("enjoy the warm weather! ");
* Nested  
  if(degrees < 60)   
   if(wind > 10)  
   alert("wear a jacket");
* Braces (optional unless there is more than one line to execute)  
  // convert fractions in the form 1/x to decimals  
  var quotient = 0; divisor = 0;  
  divisor = prompt("To calculate 1/x, enter x");  
  if (divisor > 0)  
  {  
   quotient = 1 / parseInt(divisor);  
   alert("decimal value: " + quotient);  
  }  
  else  
  {  
   alert("Please enter a number greater than zero");  
  }
* ***switch Statements***
  + The third type of conditional statement we are learning in this course
  + Can be replaced with a multi-branching *if, else if, else* statement.
  + Can only be used to test for equality, not > or <  
    (So a switch can’t do everything that an *if, else if, else* statement can.)
  + Parts of a switch statement:  
      
    var color = prompt("What is a common color for a mouse?");  
    var response = "";  
      
    key word expression  
     | |  
    switch (color) {   
     case "grey": --- condition  
     response = "Yes! "; --- statement to execute  
     break; --- marks the end of the case  
     case "gray":   
     response = "Yes!";   
     break;  
     case "brown":   
     response = "OK, sometimes";   
     break;  
     case "white":   
     response = "Just for lab mice";   
     break;  
     default: --- like an else  
     response = "I don’t think so";   
     break;

}

* Multiple cases can be used to execute one statement

var color = prompt("What is a common color for a mouse?");  
var response = "";  
  
switch (color)   
{   
 case "grey":   
 case "gray":   
 response = "Yes!";   
 break;  
 case "brown":   
 case "white":   
 response = "OK, sometimes";  
 break;  
 default:   
 response = "I don’t think so";   
 break;  
}

* Multiple statements can be executed in each case  
    
  var color = prompt("What is a common color for a mouse?");  
  var response = ""; // comment on answer  
  var score = 0; // socre for answer  
    
  switch (color)   
  {   
   case "grey":   
   case "gray":   
   response = "Yes!";   
   score = 10;  
   break;  
   case "brown":   
   case "white":   
   score = 5;  
   response = "OK, sometimes";  
   break;  
   default:   
   score = 0;  
   response = "I don’t think so";   
   break;  
  }