

Exercitiile web

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1.SayingHELLO

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title>Saying Hello</title>
  <script src="01.sayinghello.js"></script>
</head>
<body>
<p id="main">Text will appear here.</p>
<button onclick="myFunction()">Click me</button>
<button onclick="myFunctionChallenge()">Click me</button>
</body>
</html>
-----
function myFunction() {
  var person = prompt("What is your name?", "Mishu");
  if (person != null) {
    document.getElementById("main").innerHTML = "Hello, " + person + ", nice to meet you.";
  }
}

function myFunctionChallenge() {
  document.getElementById("main").innerHTML = "Hello, " + prompt("What is your name?", "Mishu") + ", nice to meet you";
}
```

2. CountingChars

```
<!doctype html>
<html>
  <head>
    <title>Counting characters</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="02.countingChars.js"></script>
  </head>
  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>
-----
function myFunction() {
  var theString = prompt("What is your input string?", "Homer");
  if (theString != "") {
    document.getElementById("main").innerHTML = theString + " has " + theString.length + " characters.";
  } else document.getElementById("main").innerHTML = "Please enter a string.";
}
```

3.PrintingQUOTES

```
<!doctype html>

<html>
  <head>
    <title>Printing quotes</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="03.printingQuotes.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>

function myFunction() {
  var quote = prompt("What is the quote?", "These are not the droids you are looking for.");
  var who = prompt("Who said that?", "Obi-wan Kenobi");
  if(quote!==null&&who!==null) {
    document.getElementById("main").innerHTML = who + " said \"" + quote + "\"";
  }
}
```

4.MadLib

```
<!doctype html>

<html>
  <head>
    <title>Mad Lib</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="04.madLib.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>

function myFunction() {
  var noun = prompt("Enter a noun", "dog");
  var verb = prompt("Enter a verb", "walk");
  var adjective = prompt("Enter and adjective", "blue");
  var adverb = prompt("Enter an adverb", "quickly");
  document.getElementById("main").innerHTML = "Do you " + verb + " your " + adjective + " " + noun + " " + adverb + "? That's hilarious!";
}
```

5. Simple MATH

```
<html>
  <head>
    <title>Simple Math</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="05.simpleMath.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>

function myFunction(){
  var first = prompt("What is the first number", "5");
  var second = prompt("What is the second number", "4");
  document.getElementById("main").innerHTML =
    first + " + " + second + " = " + (+first + +second) + "<br/>" +
    first + " - " + second + " = " + (+first - +second) + "<br/>" +
    first + " / " + second + " = " + (+first / +second) + "<br/>" +
    first + " * " + second + " = " + (+first * +second);
}
```

6. Retirement Calculator

```
<html>
  <head>
    <title>Retirement Calculator</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="06.retirementCalculator.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>

function myFunction(){
  var age = prompt("What is your current age?", "25");
  var retirement = prompt("At what age would you like to retire?", "65");
  var currentYear = new Date().getFullYear();
  parseInt(age);
  parseInt(retirement);
  var yearsLeft = retirement - age;
  document.getElementById("main").innerHTML = "You have " + yearsLeft + " years left
until you can retire. <br/> It's " + currentYear + ", so you can retire in " +
(currentYear + yearsLeft) + ".";
}
```

7.Room AREA

```
<html>
  <head>
    <title>Room area</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="07.roomArea.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <form>
      <input id="r1" type="radio" name="um" value="feet" checked="true">Feet<br>
      <input id="r2" type="radio" name="um" value="feet">Meters<br>
    </form>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>
```

```
function myFunction() {
  do{
    var length = prompt("What is the length of the room?", "15");
  } while(isNaN(length));

  do{
    var width = prompt("What is the width of the room?", "20");
  } while(isNaN(width));

  var sqFeet = length * width;
  var sqMeters = sqFeet * 0.09290304;

  if(document.getElementById("r1").checked) {
    document.getElementById("main").innerHTML = "You entered dimensions of " +
length + " feet by " + width + " feet." + "<br/> The area is " + sqFeet + " square
feet.";
  } else if(document.getElementById("r2").checked) {
    document.getElementById("main").innerHTML = "You entered dimensions of " +
length + " feet by " + width + " feet." + "<br/> The area is " + sqMeters + " square
meters." ;
  }
}
```

8.Pizza Party

```
<html>
  <head>
    <title>Pizza Party</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="08.pizzaParty.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>
```

```
function myFunction() {
  do{
    var nrOfPeople = parseInt(prompt("How many people?", "8"));
  } while(isNaN(nrOfPeople));
  do{
    var nrOfPizzas = parseInt(prompt("How many pizzas do you have?", "2"));
  } while (isNaN(nrOfPizzas));
  var slicePerPerson = (nrOfPizzas * 8) / nrOfPeople;
  var leftoverSlices = (nrOfPizzas * 8) % nrOfPeople;
  document.getElementById("main").innerHTML = nrOfPeople + " people with " +
nrOfPizzas + " pizzas. <br/> Each person gets " + Math.floor(slicePerPerson) + "
pieces of pizza. <br/> There are " + leftoverSlices + " leftover pieces.";
}
}
```

9.PaintCalculator

```
<html>
  <head>
    <title>Paint Calculator</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="09.paintCalculator.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>
```

```
function myFunction() {
  do{
    var length = parseInt(prompt("What is the length of the room?", "20"));
  } while(isNaN(length));
  do{
    var width = parseInt(prompt("What is the width of the room?", "21"));
  } while(isNaN(width));
  var sqFeet = length * width;
  const sqFeetCovered = 350;
  document.getElementById("main").innerHTML = "You will need to purchase " +
Math.ceil(sqFeet/sqFeetCovered) + " gallons of paint to cover " + sqFeet + " square
feet.";
}
}
```

10.selfCheckout

```
<html>
  <head>
    <title>Self Checkout</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="10.selfCheckout.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>
```



```

    </body>
</html>
function myFunction(){
    var nrOfItems = 3;
    var subtotal = 0;
    var price;
    var quantity;
    for(var i=0; i<nrOfItems; i++){
        do{
            price = prompt("Enter the price of item " + (i+1),Math.random()*100);
        } while (isNaN(price));
        parseFloat(price);
        do{
            quantity = prompt("Enter the quantity of item " +
(i+1),Math.random()*100);
        } while (isNaN(quantity));
        parseFloat(quantity);
        subtotal += price * quantity;
    }
    subtotal = subtotal.toFixed(2);
    var tax = (subtotal * 0.055).toFixed(2);
    var total = (+subtotal + +tax).toFixed(2);
    document.getElementById("main").innerHTML = "Subtotal: $" + subtotal + "<br/> Tax:
$" + tax + "<br/> Total: $" + total;
}

```

11. Currency Conversion

```

<html>
  <head>
    <title>Currency Conversion</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="11.currencyConversion.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>
function myFunction(){
    do{
        var amount = prompt("How many euros are you exchanging?","81");
    } while(isNaN(amount));
    var rate = 1.09140;
    var newAmount = (amount*rate).toFixed(2);
    document.getElementById("main").innerHTML = amount + " euros at an exchange rate
of " + rate + " is " + newAmount + " U.S. dollars.";
}

```

12. Computing Simple Interest

```
<html>
  <head>
    <title>Computing Simple Interest</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="12.computingSimpleInterest.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>
```

```
function myFunction() {
  do{
    var principal = prompt("Enter the principal.", "1500");
  } while (isNaN(principal));
  do{
    var rate = prompt("Enter the rate \ (1-100 range\).", "43");
  } while (isNaN(rate) || ((rate%1)!=0));
  rate=rate/10;
  do{
    var years = prompt("Enter the number of years.", "4");
  }while (isNaN(years));

  total = calculateTotalInvestment(principal, rate, years);
  total = total.toFixed(2);

  document.getElementById("main").innerHTML = "After " + years + " years at " + rate
+ "%, the investment will be worth $" + total;
  for(var i=1;i<=years;i++){
    var subtotal = +principal+calculateYearlyInvestment(principal,rate)*i;
    subtotal = subtotal.toFixed(2);
    document.getElementById("main").innerHTML += "<br/> Year " + i + ": $" +
subtotal;
  }
}

function calculateTotalInvestment(principal, rate, years){
  var interest = calculateYearlyInvestment(principal,rate)*years;
  var total = +principal + +interest;
  return total;
}

function calculateYearlyInvestment(principal,rate){
  var yearlyInterest = +principal * +rate/100;
  return yearlyInterest;
}
```

13.Determining Compound Interest

```
<html>
  <head>
    <title>Determining Compound Interest</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="13.determiningCompoundInterest.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
    <button onclick="myOtherFunction()">Don't click me</button>
  </body>
</html>
```

```
function myFunction() {
  do {
    var principal = prompt("Enter the principal.", "1500");
  } while (isNaN(principal));
  do {
    var rate = prompt("Enter the rate \ (1-100 range\ ).", "43");
  } while (isNaN(rate) || ((rate%1) != 0));
  rate = rate / 10;
  do {
    var years = prompt("Enter the number of years.", "6");
  } while (isNaN(years));
  do {
    var timesCompound = prompt("Enter the number of times the interest is
compounded per year.", "4");
  } while (isNaN(timesCompound));

  total = calculateTotalCompoundInvestment(principal, rate, years, timesCompound);
  total = total.toFixed(2);

  document.getElementById("main").innerHTML = "After " + years + " years at " + rate
+ "% and compounded " + timesCompound + " times" + ", the investment will be worth $"
+ total;
}

function calculateTotalCompoundInvestment(principal, rate, years, timesCompound) {
  var total = +principal * Math.pow(1 + rate / 100 / timesCompound, timesCompound * years);
  return total;
}

function myOtherFunction() {
  do {
    var goal = prompt("Enter the goal.", "1938.84");
  } while (isNaN(goal));
  do {
    var rate = prompt("Enter the rate \ (1-100 range\ ).", "43");
  } while (isNaN(rate) || ((rate%1) != 0));
  rate = rate / 10;
  do {
    var years = prompt("Enter the number of years.", "6");
  } while (isNaN(years));
  do {
    var timesCompound = prompt("Enter the number of times the interest is
compounded per year.", "4");
  } while (isNaN(timesCompound));

  total = calculateInitialAmountToInvest(goal, rate, years, timesCompound);
}
```

```

    total = total.toFixed(2);

    document.getElementById("main").innerHTML = "The goal of $" + goal + " can be
    achieved in " + years + " years, with a rate of " + rate + "% and compounded " +
    timesCompound + " times, with an initial investment of $" + total;
}

function calculateInitialAmountToInvest(goal, rate, years, timesCompound){
    var total = goal / Math.pow(1+rate/100/timesCompound,timesCompound*years);
    return total;
}

```

14.taxCalculator

```

<html>
  <head>
    <title>Tax Calculator</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="14.taxCalculator.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>

```

```

function myFunction(){
    var amount;
    do{
        amount = window.prompt("What is the order amount?", "10");
    } while(isNaN(amount));
    var state;
    do{
        state = window.prompt("What is the state?","wiSConSiN");
    } while(!isNaN(state));
    var taxRate = 0.055;

    var tax = +taxRate * amount;
    tax = tax.toFixed(2)/1;
    var total = +amount + tax;

    if(state.toLowerCase()=== "wi" || state.toLowerCase()=== "wisconsin"){
        document.getElementById("main").innerHTML = "The subtotal is $" + amount +
        "<br/>The tax is $" + tax + "<br/> The total is $" + total;
    }
    if(state.toLowerCase()=== "mn" || state.toLowerCase()=== "minnesota"){
        document.getElementById("main").innerHTML = "The subtotal is $" + amount;
    }
}

```

15.Password Validation

```
<html>
  <head>
    <title>Password Validation</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="15.passwordValidation.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <form>
      <input name="myUsername" id="myUsername" type="text">
      <input name="myPassword" id="myPassword" type="password">
    </form>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>
function myFunction() {
  var map = {
    'Mishu': "abc$123",
    'Richard': "p13dp1p3r"
  }

  var username;
  username = document.getElementById("myUsername").value;
  var password;
  password = document.getElementById("myPassword").value;

  if(map[username]===password) {
    document.getElementById("main").innerHTML = "Hello!";
  } else {
    document.getElementById("main").innerHTML = "I don't know you!";
  }
}
```

16.LegalDriving Age

```
<html>
  <head>
    <title>Legal Driving Age</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="16.legalDrivingAge.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <input name="age" id="age" type="text" placeholder="Age" value="16">
    <button onclick="myFunction()">Click me</button>
  </body>
</html>
```

```

function myFunction() {
    var myMap = {
        'Romania':18,
        'USA':16,
        'China':20,
        'Africa':15
    }

    var age;
    age = document.getElementById("age").value;
    if(isNaN(age) || age<0) {
        alert("Please enter a valid age!");
        return;
    }

    document.getElementById("main").innerHTML = "You can legally drive in the
following countries: <br/>";
    for (var key in myMap) {
        if (myMap[key]<=age) {
            document.getElementById("main").innerHTML += key + "<br/>";
        }
    }
}

```

17.Bood Alchool Calculator

```

<html>
<head>
    <title>Blood Alcohol Calculator</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="17.bloodAlcoholCalculator.js"></script>
</head>

<body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
</body>
</html>

```

```

function myFunction() {
    var weight;
    do{
        weight = prompt("What is your weight?", "80");
    } while(isNaN(weight));
    var gender;
    do{
        gender = prompt("What is your gender? (m/f)", "m");
    } while(gender!="m"&&gender!="f");
    var nrDrinks;
    do{
        nrDrinks = prompt("How many drinks did you have?", "4");
    } while(isNaN(nrDrinks));
    var alcoholPerDrink;
    do{
        alcoholPerDrink = prompt("How many ounces of alcohol do the consumed drinks
have?", "0.6");
    } while(isNaN(alcoholPerDrink));
    do{
        hoursSinceLastDrink = prompt("How many hours since your last drink?", "2");
    } while(isNaN(hoursSinceLastDrink));
}

```

```

var totalAlcoholConsumed = alcoholPerDrink * nrDrinks;
var BAC = calculateBAC(totalAlcoholConsumed, weight, gender, hoursSinceLastDrink);
BAC = BAC.toFixed(3);

if(BAC>0.08){
    document.getElementById("main").innerHTML = "Your BAC is " + BAC + "<br/>It is
NOT legal for you to drive.";
} else document.getElementById("main").innerHTML = "Your BAC is "+ BAC + "<br/>It
is legal for you to drive.";
}

function calculateBAC(A,W,g,H) {
    var r;
    if(g=="f"){
        r=0.66;
    } else r=0.73;
    var BAC=(A*5.14/W*r)-0.015*H;
    return BAC;
}

```

18. Temperature Convert

```

<html>
  <head>
    <title>Temperature Converter</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="18.temperatureConverter.js"></script>
  </head>

  <body onload="loadOptions()">
    <select id="optionsList">
    </select>
    <input id="value" type="number" onchange="convert()">
    <input id="result" type="number" readonly="true">

  </body>
</html>
function loadOptions(){
    var scales = {
        'C': 'Celsius',
        'F': 'Fahrenheit',
        'K': 'Kelvin'
    }
    var select = document.getElementById('optionsList');
    var option;
    for(var key1 in scales){
        for(var key2 in scales){
            if(key1!=key2){
                option = document.createElement('option');
                option.innerHTML = scales[key1] + " to " + scales[key2];
                option.value= key1+key2;
                select.appendChild(option);
            }
        }
    }
}

```

```

function convert(){
    var scale1 = document.getElementById("optionsList").value[0];
    var scale2 = document.getElementById("optionsList").value[1];
    var value = document.getElementById("value").value;
    var convertedValue;

    switch(scale1+scale2){
        case 'CF':
            convertedValue = (value*9/5)+32;
            break;
        case 'CK':
            convertedValue = value+273.15;
            break;
        case 'FC':
            convertedValue = (value-32)*5/9;
            break;
        case 'FK':
            convertedValue = (value + 459.67)*5/9;
            break;
        case 'KC':
            convertedValue = value - 273.15;
            break;
        case 'KF':
            convertedValue = value * 9/5 - 459.67;
            break;
        default:
            convertedValue = null;
            break;
    }

    convertedValue = convertedValue.toFixed(1);

    document.getElementById("result").value = convertedValue;
}

```

19.BMI Calculator

```

<html>
  <head>
    <title>BMI Calculator</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="19.bmiCalculator.js"></script>
  </head>
  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>

```

```

function myFunction(){
    var weighth;
    do{
        weighth = prompt("What is your weighth",150);
    } while(isNaN(weighth));
    var height;
    do{
        height = prompt("What is your height",72);
    } while(isNaN(height));
}

```



```

var bmi = calculateBMI(weighth,height);
bmi=bmi.toFixed(2);
document.getElementById("main").innerHTML = "Your BMI is " + bmi;
if(bmi>25){
    document.getElementById("main").innerHTML += "<br/>You are overweighth. You
should see a doctor.";
} else if (bmi<18.5){
    document.getElementById("main").innerHTML += "<br/>You are underweighth. You
should see a doctor.";
} else document.getElementById("main").innerHTML += "<br/> You are within the
ideal weighth range.";
}

function calculateBMI(weight,height){
    return (weight/(height*height))*703;
}

```

20.MultiState Sales tax Calculator

```

<html>
  <head>
    <title>Multistate Sales Tax Calculator</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="20.multistateSalesTaxCalculator.js"></script>
  </head>
  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>

```

```

function myFunction(){
  var tax;
  var total;
  var amount;
  do{
    amount = prompt("What is the order amount?","10");
  } while(isNaN(amount));
  tax=0.05*amount;
  var state;
  state = prompt("What state do you live in?","Wisconsin");

  if(state.toLowerCase()=== "wisconsin" || state.toLowerCase()=== "wi"){
    var county;
    county = prompt("What county do you live in?","Eau Claire");
    switch(county.toLowerCase()){
      case "eau claire":
        tax+=0.005*amount;
        break;
      case "dunn":
        tax+=0.004*amount;
        break;
      default:
        console.log("Error!");
        break;
    }
  } else if(state.toLowerCase()=== "illinois" || state.toLowerCase()=== "il"){
    tax=0.08*amount;
  }
}

```

```

    total = +amount + +tax;
    total = total.toFixed(2);
    document.getElementById("main").innerHTML="The tax is "+tax+"<br/>The total is "+total;
}

```

21.Number to Names

```

<html>
  <head>
    <title>Number to Names</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="21.numberToNames.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>

```

```

function myFunction() {
  var number;
  var month;
  var monthMap = {
    1: 'january',
    2: 'february',
    3: 'march',
    4: 'april',
    5: 'may',
    6: 'june',
    7: 'july',
    8: 'august',
    9: 'september',
    10: 'october',
    11: 'november',
    12: 'december'
  }
  do {
    number=prompt("What is the number of the month?", "3");
  } while (isNaN(number));
  document.getElementById("main").innerHTML = "The name of the month is " +
monthMap[number] + ".";
}

```

22. Comparing Number

```

<html>
  <head>
    <title>Comparing Numbers</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="22.comparingNumber.js"></script>
  </head>

  <body>
    <p id="main">Text will appear here.</p>

```

```

        <button onclick="myFunction()">Click me</button>
    </body>
</html>

```

```

var numberArray = [];

function myFunction() {
    var number;
    for(var i=0;i<5;i++){
        do{
            number=prompt("What is the value of number " + (i+1),"1");
        } while (isNaN(number) || (nrExists(number)))
        numberArray[i]=number;
    }
    var largestNumber = findLargest(numberArray);
    document.getElementById("main").innerHTML = "The largest number is " +
largestNumber + ".";
}

function nrExists(number) {
    for(var i=0;i<numberArray.length;i++){
        if(numberArray[i]===number){
            return true;
        }
    }
    return false;
}

function findLargest(numberArray) {
    var max=numberArray[0];
    for(var i=1;i<numberArray.length;i++){
        console.log("comparing "+numberArray[i]+" to "+max);
        if(+numberArray[i]>+max){
            max=numberArray[i];
            console.log("found max: "+max);
        }
    }
    return max;
}

```

23.TroubleShooting CarIssue

```

<html>
    <head>
        <title>Troubleshooting Car Issues</title>
        <meta charset="UTF-8">
        <meta name="viewport" content="initial-scale=1.0">
        <script src="23.troubleshootingCarIssues.js"></script>
    </head>

    <body>
        <p id="main">Text will appear here.</p>
        <button onclick="myFunction()">Click me</button>
    </body>
</html>

```

```

function myFunction() {
    var response;
    do{
        response=prompt("Is the car silent when you turn the key?","y");
    } while(response!="y"&&response!="n");
    if(response==="y") {

```

```

do{
    response=prompt("Are the battery terminals corroded?", "y");
} while(response!="y"&&response!="n");
if(response=="y"){
    document.getElementById("main").innerHTML = "Clean terminals and try
starting again.";
} else {
    document.getElementById("main").innerHTML = "Replace cables and try
again.";
}
} else {
    do{
        response=prompt("Does the car make a clicking noise?", "y");
    } while(response!="y"&&response!="n");
    if(response=="y"){
        document.getElementById("main").innerHTML = "Replace the batteries.";
    } else {
        do{
            response=prompt("Does the car crank up but fail to start?");
        }while(response!="y"&&response!="n");
        if(response=="y"){
            document.getElementById("main").innerHTML="Check spark plug
connections.";
        } else {
            do{
                response=prompt("Does the engine start and the die?", "y")
            } while(response!="y"&&response!="n");
            if(response=="n"){
                document.getElementById("main").innerHTML="Get it in for
service.";
            } else {
                do{
                    response=prompt("Does your car have fuel injection?");
                } while(response!="y"&&response!="n");
                if(response=="y"){
                    document.getElementById("main").innerHTML = "Check to ensure
the choke is opening and closing.";
                } else document.getElementById("main").innerHTML="Get it in for
service.";
            }
        }
    }
}
}
}
}

```

24. AnaGramChecker

```

<html>
  <head>
    <title>Anagram checker</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="24.anagramChecker.js"></script>
  </head>
  <body>
    <p id="main">Text will appear here.</p>
    <button onclick="myFunction()">Click me</button>
  </body>
</html>

```

```

function myFunction(){
    var string1;
    string1 = prompt("Enter the first string:", "note");
    var string2;
    string2 = prompt("Enter the second string:", "tone");
    string1 = string1.toLowerCase();
    string2 = string2.toLowerCase();
    if(isAnagram(string1, string2)){
        document.getElementById("main").innerHTML = "The strings are anagrams.";
    } else document.getElementById("main").innerHTML = "The strings are NOT
anagrams.";
}

function isAnagram(string1, string2){
    var i, j;
    var found;

    string1 = removeSpecialChars(string1);
    string2 = removeSpecialChars(string2);

    for(i=0; i<string1.length; i++){
        found=false;
        for(j=0; j<string2.length; j++){
            console.log("comparing " + string1[i] + " to " + string2[j]);
            if(string1[i]==string2[j]&&found==false){
                console.log("found 2 matching letters, removing " + string1[i]);
                string2 = string2.replace(string2[j], "");
                console.log("string 1 is equal to " + string1);
                console.log("string 2 is equal to " + string2);
                found=true;
                break;
            }
        }
        if(found==false){
            console.log("returning false");
            return false;
        }
    }
    if(string2.length===0){
        console.log("returning true");
        return true;
    } else {
        console.log("returning false");
        return false;
    }
}

function removeSpecialChars(string){
    return string.replace(/[^a-zA-Z0-9]/g, "")
}

```

25.Password Strength Indicator

```

<html>
  <head>
    <title>Password Strength Indicator</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="25.passwordStrengthIndicator.js"></script>

```

```

</head>

<body>
  <p id="main">Enter a password to validate it.</p>
  <input id="password" type="text" onchange="myFunction()" >
</body>
</html>
function myFunction() {
  var password = document.getElementById("password").value;
  var passwordLevel = validatePassword(password);
  passwordLevel = levelToString(passwordLevel);
  document.getElementById("main").innerHTML = "The password " + password + " is a "
+ passwordLevel + " password.";
}

function validatePassword(password) {
  var cNumbers=0;
  var cChars=0;
  var cSpecial=0;
  var letter = /^[a-zA-Z]/;
  var number = /^[0-9]/;
  for(var i=0;i<password.length;i++) {
    if(password[i].match(letter)) {
      cChars++;
    } else if (password[i].match(number)) {
      cNumbers++;
    } else {
      cSpecial++;
    }
  }
  if(cChars!=0&&cNumbers!=0&&cSpecial!=0&&password.length>=8) {
    return 4;
  } else if(cChars!=0&&cNumbers!=0&&password.length>=8) {
    return 3;
  } else if(cNumbers===0&&cSpecial===0&&password.length<8) {
    return 2;
  } else if(cChars===0&&cSpecial===0&&password.length<8) {
    return 1;
  }
}

function levelToString(passwordLevel) {
  switch(passwordLevel) {
    case 1:
      return 'very weak';
      break;
    case 2:
      return 'weak';
      break;
    case 3:
      return 'strong';
      break;
    case 4:
      return 'very strong';
      break;
    default:
      return '"pdf didn\'t include this"';
      break;
  }
}

```

26. Months To PayCredit

```
<html>
  <head>
    <title>Months to pay credit card</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="26.monthsToPayCreditCard.js"></script>
  </head>

  <body>
    <form>
      <input id="r1" type="radio" name="monthsOrAmount" value="months"
checked="true">Find out number of months<br>
      <input id="r2" type="radio" name="monthsOrAmount" value="amount">Find out
the amount to be payed per month<br>
    </form>
    <button onclick="myFunction()">Click me</button>
    <p id="main"></p>
  </body>
</html>
```

```
function myFunction() {
  var balance;
  do {
    balance = prompt("What is your balance?", "5000");
  } while (isNaN(balance));
  var APR;
  do {
    APR = prompt("What is the APR on the card (as a percent)?", "12");
  } while (isNaN(APR) && APR < 1);
  APR = APR / 36500;
  var numberOfMonths;
  var monthlyPayment;
  if (document.getElementById("r1").checked) {
    do {
      monthlyPayment = prompt("What is the monthly payment you can make?", "100");
    } while (isNaN(monthlyPayment));
    numberOfMonths = calculateMonthsUntilPaidOff(APR, balance, monthlyPayment);
    document.getElementById("main").innerHTML = "It will take you " + numberOfMonths
+ " months to pay off this card.";
  } else if (document.getElementById("r2").checked) {
    do {
      numberOfMonths = prompt("What is the number of months you want to keep
paying?", "70");
    } while (isNaN(numberOfMonths));
    monthlyPayment = calculateAmountToPayPerMonth(APR, balance, numberOfMonths);
    document.getElementById("main").innerHTML = "You will have to pay $" +
monthlyPayment + " each month.";
  }
}

function calculateMonthsUntilPaidOff(dailyRate, balance, monthlyPayment) {
  return Math.ceil((-1) / 30 * (Math.log(1 + balance / monthlyPayment * (1 -
Math.pow(1 + dailyRate, 30))) / Math.log(1 + dailyRate)));
}

function calculateAmountToPayPerMonth(dailyRate, balance, months) {
  var monthlyPayment = (balance * (1 -
Math.pow(1 + dailyRate, 30))) / (Math.pow(1 / 10, 30 * Math.log(1 + dailyRate) * months) - 1);
  monthlyPayment = monthlyPayment.toFixed(2);
  return monthlyPayment;
}
```

27. Validating Inputs

```
<html>
  <head>
    <title>Validating Inputs</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="27.validatingInputs.js"></script>
  </head>

  <body>
    First name:<input type="text" id="fname" onblur="myFunction()">
    <br>
    Last name:<input type="text" id="lname" onblur="myFunction()">
    <br>
    ZIP code:<input type="text" id="zip" onblur="myFunction()">
    <br>
    Employee ID:<input type="text" id="emplid" onblur="myFunction()">
    <br>
    <p id="main"></p>
  </body>
</html>
```

```
function myFunction() {
  var fname = readInput("fname");
  var lname = readInput("lname");
  var zip = readInput("zip");
  var emplid = readInput("emplid");
  clear();
  if(validateInput(fname,lname,zip,emplid)){
    write("<br/>There were no errors found.");
  }
}

function isLetter(char) {
  return 'abcdefghijklmnopqrstuvwxyz'.indexOf(char.toLowerCase()) >=0;
}

function isDigit(char) {
  return '0123456789'.indexOf(char.toLowerCase()) >=0;
}

function readInput(element) {
  return document.getElementById(element).value;
}

function validateInput(fname,lname,zip,emplid) {
  var returnValue=true;

  if(fname==="") {
    write("<br/>The first name must be filled in.");
    returnValue=false;
  } else if(fname.length<2) {
    write("<br/>\""+fname+"\" is not a valid first name. It is too short.");
    returnValue=false;
  }

  if(lname==="") {
    write("<br/>The last name must be filled in.");
    returnValue=false;
  } else if(lname.length<2) {
    write("<br/>\""+lname+"\" is not a valid last name. It is too short.");
    returnValue=false;
  }
}
```



```

    if(zip.length>0&&zip.length<3){
        write("<br/>Zip code must be at least 3 characters long.");
        returnValue=false;
    } else if (zip.length>6){
        write("<br/>Zip code must be at most 6 characters long.");
        returnValue=false;
    }
    else {
        for(var i=0;i<zip.length;i++){
            if(!isDigit(zip[i])){
                write("<br/>Zip code must contain only numbers.");
                returnValue=false;
            }
        }
    }

    if(emplid.length>0&&emplid.length!=6){
        write("<br/>Employee ID must be 6 characters long.");
        returnValue=false;
    } else if (!isLetter(emplid[0]) || !isLetter(emplid[1]) || emplid[2]!=="-" ||
!isDigit(emplid[3]) || !isDigit(emplid[4]) || !isDigit(emplid[5])){
        write("<br/>\"" + emplid + "\" is not a valid employee ID format. Format is
\\\"AA-123\\\".");
        returnValue=false;
    }

    return returnValue;
}

function write(string){
    document.getElementById("main").innerHTML += string;
}

function clear(){
    document.getElementById("main").innerHTML = "";
}

```

28.AddingNumbers

```

<html>
  <head>
    <title>Adding Numbers</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="28.addingNumbers.js"></script>
  </head>

  <body>
    <button onclick="myFunction()">Click me</button>
    <p id="main"></p>
  </body>
</html>

```

```

function myFunction(){
    var sum=0;
    var times;
    var n;
    do{
        times = prompt("How many numbers do you want to add?","5");
    } while(isNaN(times));
}

```

```

    for(var i=0;i<times;i++){
        n=prompt("Enter a number",i+1);
        if(isDigit(n)){
            sum+=+n;
        }
    }
    write("The sum is " + sum);
}

function isDigit(char){
    return '0123456789'.indexOf(char.toLowerCase()) >=0;
}

function write(string){
    document.getElementById("main").innerHTML = string;
}

```

29.Bad Input

```

<html>
  <head>
    <title>Bad Input</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="29.badInput.js"></script>
  </head>

  <body>
    <button onclick="myFunction()">Click me</button>
    <p id="main"></p>
  </body>
</html>

```

```

function isDigit(char){
    return '0123456789'.indexOf(char.toLowerCase()) >=0;
}

function isLetter(char){
    return 'abcdefghijklmnopqrstuvwxyz'.indexOf(char.toLowerCase()) >=0;
}

function write(string){
    document.getElementById("main").innerHTML += string;
}

function clear(){
    document.getElementById("main").innerHTML = "";
}

function myFunction(){
    clear();
    var r;
    do{
        r=prompt("What is the rate of return?","0");
        if(isNaN(r)){
            alert("Input must be a number.");
        } else if (r=='0'){
            alert("Input can't be 0.");
        }
    } while(isNaN(r) || r=='0');
}

```

```

    var years = 72/r;
    write("It will take " + years + " years to double your initial investment.");
}

```

30. Multiplication Table

```

<html>
  <head>
    <title>Multiplication Table</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="30.multiplicationTable.js"></script>
  </head>

  <body>
    <button onclick="myFunction()">Click me</button>
    <p id="main"></p>
  </body>
</html>

```

```

function isDigit(char){
    return '0123456789'.indexOf(char.toLowerCase()) >=0;
}

function isLetter(char){
    return 'abcdefghijklmnopqrstuvwxyz'.indexOf(char.toLowerCase()) >=0;
}

function write(string){
    document.getElementById("main").innerHTML += string;
}

function clear(){
    document.getElementById("main").innerHTML = "";
}

function myFunction(){
    clear();
    var numbers = [0,1,2,3,4,5,6,7,8,9,10,11,12];
    write("//\t");
    for(var k=0;k<numbers.length;k++){
        write(numbers[k]+"\\t");
    }
    write("<br/>");
    for(var i=0;i<numbers.length;i++){
        write(numbers[i]+"\\t");
        for(var j=0;j<numbers.length;j++){
            write(numbers[i]*numbers[j]);
            write("\\t");
        }
        write("<br/>");
    }
}

```

31.Heart Rate

```
<html>
  <head>
    <title>Multiplication Table</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="31.heartRate.js"></script>
  </head>

  <body onload="updateSlider()">
    Resting pulse:<input id="restingPulse" type="number">
    <br>
    Age:<input id="age" type="number">
    <br>
    Intensity: 55%
    <input id="intensity" type="range" min="55" max="95" step="5" oninput
="myFunction()" > 95%
    <input id="sliderValue" readonly="true">
    <p id="main"></p>
  </body>
</html>
```

```
function isDigit(char){
  return '0123456789'.indexOf(char.toLowerCase()) >=0;
}

function isLetter(char){
  return 'abcdefghijklmnopqrstuvwxyz'.indexOf(char.toLowerCase()) >=0;
}

function write(string){
  document.getElementById("main").innerHTML += string;
}

function clear(){
  document.getElementById("main").innerHTML = "";
}

function myFunction(){
  clear();
  document.getElementById("sliderValue").value =
document.getElementById("intensity").value+"%";

  var restingPulse = document.getElementById("restingPulse").value;
  var age=document.getElementById("age").value;
  var intensity=document.getElementById("intensity").value/100;

  var heartRate = Math.floor(((220-age)-restingPulse)*intensity)+(restingPulse);
  if(restingPulse!=""&&age!=""){
    write("Your hart rate is " + heartRate);
  } else write("Enter values")
}
```

32. Guess Number

```
<html>
  <head>
    <title>Multiplication Table</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="32.guessNumber.js"></script>
  </head>

  <body>
    <button onclick="myFunction()">Start game</button>
    <p id="main"></p>
  </body>
</html>

function isDigit(char){
  return '0123456789'.indexOf(char.toLowerCase()) >=0;
}

function isLetter(char){
  return 'abcdefghijklmnopqrstuvwxyz'.indexOf(char.toLowerCase()) >=0;
}

function write(string){
  document.getElementById("main").innerHTML += string;
}

function clear(){
  document.getElementById("main").innerHTML = "";
}

function myFunction(){
  var difficulty;
  var randomNumber;
  var input;
  var inputs = [];
  var guesses=0;
  var again;
  var praise;

  do{
    do{
      difficulty = prompt("Pick a difficulty level (1, 2 or 3)","1");
    } while (isNaN(difficulty) || difficulty<1 || difficulty>3);
    randomNumber = getRandom(difficulty);

    guesses=0;
    inputs = [];

    input = prompt("I have my number. What's your guess?","1");
    guesses++;
    inputs.push(input);

    while(input!=randomNumber){
      if(input<randomNumber){
        input = prompt("Too low. Guess again:","5");
        if(inputs.indexOf(input)>-1){
          alert("Number was already entered!");
        }
        guesses++;
        inputs.push(input);
      } else {
        input = prompt("Too high. Guess again:","2");
      }
    }
  } while(true);
}
```

```

        if(inputs.indexOf(input)>-1){
            alert("Number was already entered!");
        }
        guesses++;
        inputs.push(input);
    }
}
praise = generatePraise(guesses);
alert("You got it in " + guesses + " guesses! " + praise);
do{
    again = prompt("Play again? (y/n)", "n");
} while (again!=='y'&&again!=='n');
} while (again=="y");
document.getElementById("main").innerHTML = "History:" + inputs;
}

function getRandom(difficulty){
    if(difficulty==='1'){
        return Math.floor(Math.random() * (10 - 1 + 1)) + 1;
    } else if(difficulty==='2'){
        return Math.floor(Math.random() * (100 - 1 + 1)) + 1;
    } else if(difficulty==='3'){
        return Math.floor(Math.random() * (1000 - 1 + 1)) + 1;
    } else return false;
}

function generatePraise(guesses){
    if(guesses==1){
        return "You're a mind reader! ";
    } else if (guesses>=2&&guesses<=3){
        return "Most impressive. ";
    } else if (guesses>=4&&guesses<=6){
        return "You can do better than that. ";
    } else if (guesses>=7){
        return "Better luck next time. ";
    }
}

```

33.Magic Ball

```

<html>
  <head>
    <title>Magic 8 Ball</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="33.magic8Ball.js"></script>
  </head>

  <body>
    <button onclick="myFunction()">Start game</button>
    <p id="main"></p>
  </body>
</html>

```

```

function write(string){
    document.getElementById("main").innerHTML += string;
}

function clear(){
    document.getElementById("main").innerHTML = "";
}

```

```

}

function generateRandomBetween(min,max){
    return Math.floor(Math.random() * (max - min + 1)) + min;
}

function myFunction(){
    clear();
    var question = prompt("What's your question?", "Will i be rich and famous?");
    var randomNumber = generateRandomBetween(1,4);
    switch(randomNumber){
        case 1:
            write("Yes");
            break;
        case 2:
            write("No");
            break;
        case 3:
            write("Maybe");
            break;
        case 4:
            write("Ask again later");
            break;
        default:
            write("Error");
            break;
    }
}

```

34. Employee List Removal

```

<html>
  <head>
    <title>Employee List Removal</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="34.employeeListRemoval.js"></script>
  </head>

  <body onload="showEmployees()">
    <p id="main"></p>
    <button onclick="myFunction()">Delete Employee</button>
  </body>
</html>

```

```

var employees = ["Adrian Arby", "Bob Bean", "Carl Marc's", "Daniel"];

function myFunction(){
    var employee = prompt("Write employee name:", "Daniel");
    removeEmployee(employee);
    clear();
    showEmployees();
}

function showEmployees(){
    for(var i=0;i<employees.length;i++){
        write((i+1)+": " +employees[i]+"<br>");
    }
}

function removeEmployee(employee){

```

```

var index;
for(var i=1;i<employees.length;i++){
    if(employee.toLowerCase()==employees[i].toLowerCase()){
        index=i;
    }
}
if(index>-1){
    employees.splice(index,1);
} else {
    alert("Employee does not exist.");
}
}

function write(string){
    document.getElementById("main").innerHTML += string;
}

function clear(){
    document.getElementById("main").innerHTML = "";
}

```

35.PikingWinner

```

<html>
  <head>
    <title>Picking a Winner</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="35.pickingWinner.js"></script>
  </head>

  <body>
    <p id="main">Enter a blank name to stop.</p>
    <button onclick="myFunction()">Enter names</button>
  </body>
</html>

```

```

function write(string){
    document.getElementById("main").innerHTML += string;
}

function clear(){
    document.getElementById("main").innerHTML = "";
}

function generateRandomBetween(min,max){
    return Math.floor(Math.random() * (max - min + 1)) + min;
}

function myFunction(){
    var names = [];
    var name;
    do{
        name = prompt("Enter a name:");
        if(name!=""){
            names.push(name);
        }
    } while(name!="");
}

```



```

    var winner = generateRandomBetween(0,names.length-1);
    showNames(names);
    console.log(winner);
    clear();
    write("The winner is... " + names[winner]);
}

function showNames(names) {
    for(var i=0;i<names.length;i++){
        console.log(names[i]);
    }
}

```

36.Computing Statistics

```

<html>
  <head>
    <title>Computing Statistics</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="36.computingStatistics.js"></script>
  </head>
  <body>
    <p id="main">Enter "done" to stop.</p>
    <button onclick=myFunction() ">Enter numbers</button>
  </body>
</html>
function myFunction() {
    var numbers = [];
    var number;

    do{
        number = prompt("Enter a number:", "100");
        if(!isNaN(number)) {
            numbers.push(number);
        } else if (number==="done") {
            alert("Stopped entering values.");
        } else {
            alert("You entered a non-numeric value.");
        }
    } while (number!=="done");
    clear();
    write("Numbers are: " + numbers);
    var mean, max, min, stdv;
    mean=getMean(numbers).toFixed(2);
    write("<br>The mean is: " + mean);
    min=getMin(numbers);
    write("<br>The minimum is: " + min);
    max=getMax(numbers);
    write("<br>The maximum is: " + max);
    stdv=getSTDEV(numbers);
    write("<br>The standard deviation is: " + stdv);

}

function write(string){
    document.getElementById("main").innerHTML += string;
}

```

```

function clear(){
    document.getElementById("main").innerHTML = "";
}

function getMin(numbers){
    var min = numbers[0];
    for(var i=1;i<numbers.length;i++){
        if(numbers[i]<min){
            min = numbers[i];
        }
    }
    return min;
}

function getMax(numbers){
    var max = numbers[0];
    for(var i=1;i<numbers.length;i++){
        if(numbers[i]>max){
            max = numbers[i];
        }
    }
    return max;
}

function getMean(numbers){
    var sum=0;
    for(var i=0;i<numbers.length;i++){
        sum+=numbers[i];
    }
    return sum/numbers.length;
}

function getSTDEV(numbers){
    var sqrdValues = [];
    var sqrdValue;
    var mean = getMean(numbers);
    for(var i=0;i<numbers.length;i++){
        sqrdValue = Math.pow(numbers[i]-mean,2);
        sqrdValues.push(sqrdValue);
    }
    return Math.sqrt(getMean(sqrdValues));
}

```

37.PasswordGenerator

```

<html>
  <head>
    <title>Password Generator</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="initial-scale=1.0">
    <script src="37.passwordGenerator.js"></script>
  </head>

  <body>
    <p id="main"></p>
    <button onclick="myFunction()">Generate Password</button>
  </body>
</html>

```

```

function write(string){
    document.getElementById("main").innerHTML += string;
}

```

```

}

function clear(){
    document.getElementById("main").innerHTML = "";
}

function myFunction(){
    var minLength;
    do{
        minLength = prompt("What's the minimum length?", "8");
    } while(isNaN(minLength));
    var nrSpecialChars;
    do{
        nrSpecialChars = prompt("How many special characters?", "2");
    } while(isNaN(nrSpecialChars));
    var nrDigits;
    do{
        nrDigits = prompt("How many numbers?", "2");
    } while(isNaN(nrDigits));
    var nrLetters = minLength-nrSpecialChars-nrDigits;

    var thePass;
    thePass = generatePassword(nrSpecialChars, nrDigits, nrLetters);
    write(thePass+"<br>");
}

function generatePassword(nrSpecialChars, nrDigits, nrLetters){
    var thePass="";
    var letters='abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ';
    var digits='0123456789';
    var specialChars="!\"#$%&'()*+,-./:;<=>?@[\\]^_`{|}~";
    var i;
    for(i=0; i<nrLetters; i++){
        thePass+=letters.charAt(Math.floor(Math.random()*letters.length));
    }
    for(i=0; i<nrDigits; i++){
        thePass+=digits.charAt(Math.floor(Math.random()*digits.length));
    }
    for(i=0; i<nrSpecialChars; i++){
        thePass+=specialChars.charAt(Math.floor(Math.random()*specialChars.length));
    }
    thePass = randomizePassword(thePass);
    return thePass;
}

function randomizePassword(thePass){
    thePass=thePass.split('');
    for(var i=0; i<thePass.length; i++){
        var random = generateRandomBetween(0, thePass.length-1);
        var temp = thePass[i];
        thePass[i]=thePass[random];
        thePass[random]=temp;
    }
    return thePass.join('');
}

function generateRandomBetween(min, max){
    return Math.floor(Math.random() * (max - min + 1)) + min;
}

```
