Week 4 - Strings 1 - Monday Recap

This week, you will first explore associative arrays, then continue into *strings*. Some or all of these methods will be used to solve this week's challenges.

.length *.split* *.join* *.concat* *for...in loops*

Arrs2Map

Given two arrays, create an associative array (map) containing keys of the first, and values of the second.

```
// Assoc array == map == hash == dictionary
// More keys than vals? Extra keys exist
// but == undefined. More vals than keys?
// Extra values are discarded
function arrs2Map(keyArr, valArr) {
  var returnMap = { };
  if (   keyArr instanceof Array
      && valArr instanceof Array) {
    for (var idx = 0; idx < keyArr.length;
             idx++) {
      returnMap[keyArr[idx]] = valArr[idx];
    }
  }
  return returnMap;
}
```

InvertHash

Create invertHash(assocArr) that converts a hash's keys to values and values to corresponding keys. Example: given {'name': 'Zaphod'; 'numHeads': 2}, you should return {'Zaphod': 'name'; 2: 'numHeads'}. You will need to learn and use a JavaScript ***for ... in*** here!

```
// (for...in) iterates 'hash's keys. If
// keys share a val, val maps to LAST key
function invertHash(hash) {
  var newHash = {};
  if (typeof hash === "object") {
    for (key in hash) {
      var value = hash[key];
      newHash[value] = key;
    }
  }
  return newHash;
}
```

ReverseString

Implement reverseString(str) that will return the string of the same length but with characters reversed. Do not use the built-in reverse()!

```
// Copy str chars back->front to new arr;
// Join into string
function reverseStr(str)
{
  if (typeof str !== "string") {return "";}

  var arr = [];
  for (var idx = str.length - 1; idx >= 0;
                                 idx--) {
    arr.push(str[idx]);
  }
  return arr.join('');
}
```

Week 4 - Strings 1 - Tuesday

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.length *.split* *.join* *.concat* *for...in loops*

Remove Blanks

Create a function that, given a string, returns that string, without blanks. Given " play that Funky Music ", return "playthatFunkyMusic".

Answer:

Acronyms

Create a function that, given a string, returns the string's acronym (first letters only, capitalized). Given "there's no free lunch - gotta pay yer way", return "TNFL-GPYW". Given "Live from New York, it's Saturday Night!", you should return "LFNYISN"

Answer:

Get String Digits

Create a JavaScript function that, given a string, returns the integer made from that string's digits. So, given an input string of "0s1a3y5w7h9a2t4?6!8?0", the function should return the number 1,357,924,680.

Answer:

Tomorrow: parenthetically speaking....