# JavaScript Lab 1

Upload in your GitHub account and send the link Due Date: Friday, 13th

# Create a function for each question (Total 10) in one JavaScript file. You have to submit your js file with 10 functions by the end of the class.

☐ Given two strings, a and b, return the result of putting them together in the order abba, e.g. "Hi" and "Bye" returns "HiByeByeHi".

#### (Test Cases)

```
makeAbba("Hi", "Bye") \rightarrow "HiByeByeHi" makeAbba("Yo", "Alice") \rightarrow "YoAliceAliceYo" makeAbba("What", "Up") \rightarrow "WhatUpUpWhat"
```

☐ Given a string, return true if it ends in "ly".

#### (Test Cases)

```
endsLy("oddly") \rightarrow true
endsLy("y") \rightarrow false
endsLy("oddy") \rightarrow false
```

☐ Given a string of even length, return the first half. So the string "WooHoo" yields "Woo".

## (Test Cases)

```
firstHalf("WooHoo") \rightarrow "Woo"
firstHalf("HelloThere") \rightarrow "Hello"
firstHalf("abcdef") \rightarrow "abc"
```

☐ Given a string, return a "rotated right 2" version where the last 2 chars are moved to the start. The string length will be at least 2.

#### (Test Cases)

```
right2("Hello") \rightarrow "loHel" right2("java") \rightarrow "vaja"
```

```
right2("Hi") → "Hi"
```

☐ Given two strings, append them together (known as "concatenation") and return the result. However, if the concatenation creates a double-char, then omit one of the chars, so "abc" and "cat" yields "abcat".

#### (Test Cases)

```
 \begin{split} & \mathsf{conCat}("\mathsf{abc", "cat"}) \to "\mathsf{abcat"} \\ & \mathsf{conCat}("\mathsf{dog", "cat"}) \to "\mathsf{dogcat"} \\ & \mathsf{conCat}("\mathsf{abc", ""}) \to "\mathsf{abc"} \end{split}
```

☐ Given a string, return true if the first 2 chars in the string also appear at the end of the string, such as with "edited".

#### (Test Cases)

```
frontAgain("edited") \rightarrow true
frontAgain("edit") \rightarrow false
frontAgain("ed") \rightarrow true
```

☐ Given a string, return a version without the first 2 chars. Except keep the first char if it is 'a' and keep the second char if it is 'b'. The string may be any length. Harder than it looks.

# (Test Cases)

```
deFront("Hello") → "Ilo"
deFront("java") → "va"
deFront("away") → "aay"
```

☐ Given a string, if one or both of the first 2 chars is 'x', return the string without those 'x' chars, and otherwise return the string unchanged. This is a little harder than it looks.

# (Test Cases)

```
withoutX2("xHi") \rightarrow "Hi" withoutX2("Hxi") \rightarrow "Hi" withoutX2("Hi") \rightarrow "Hi"
```

☐ Given 2 strings, a and b, return a new string made of the first char of a and the last char of b, so "yo" and "java" yields "ya". If either string is length 0, use '@' for its missing char.

# (Test Cases)

```
\label{eq:lastChars} $$ | astChars("last", "chars") \to "ls" $$ | astChars("yo", "java") \to "ya" $$ | astChars("hi", "") \to "h@" $$
```

☐ Given a string of even length, return a string made of the middle two chars, so the string "string" yields "ri". The string length will be at least 2.

## (Test Cases)

```
middleTwo("string") \rightarrow "ri" middleTwo("code") \rightarrow "od" middleTwo("Practice") \rightarrow "ct"
```