

# Kata 14 - Change Calculator

Assignment

85 - 120 minutes



Status

Complete

## STRETCH ACTIVITY

This activity is marked as stretch. We strongly suggest you come back to it if/when you've completed all the core exercises for the prep course.

In this activity, we are going to create a function that can calculate which coins we should use when we need to give change.

## Change Calculator

We will be given two numbers, the total of a transaction, and the amount of cash given to the cashier. Both of these numbers will be represented as whole numbers in cents. Therefore \$10 will be represented as **1000**.

Our function **calculateChange** should return an object which describes the total amount of change for the cashier to give back. Although pennies are not used in circulation, we will still calculate the amount of pennies to give back.

Valid denominations are as follows:

- Twenty dollars
- Ten dollars
- Five dollars
- Two dollars
- One dollar
- Quarter (25¢)
- Dime (10¢)
- Nickel (5¢)
- Penny (1¢)

## JS

```
const calculateChange = function(total, cash) {  
  // Your code here  
};  
  
console.log(calculateChange(1787, 2000));  
console.log(calculateChange(2623, 4000));  
console.log(calculateChange(501, 1000));
```

# Expected Output

```
{ twoDollar: 1, dime: 1, penny: 3 }
{ tenDollar: 1, twoDollar: 1, oneDollar: 1, quarter: 3, penny: 2 }
{ twoDollar: 2, quarter: 3, dime: 2, penny: 4 }
```

👉 Create a function named `calculateChange` that takes in a total amount of a bill and the total cash given to pay that bill. Return a new object that describes the total amount of change for the cashier to give back. Omit any types of change that you shouldn't give back, i.e. if you don't give back a twenty dollar bill, don't include it in the results.

👉 Submit Your Work

- Browse to [gist.github.com](https://gist.github.com) and create a new gist.
- Copy-and-paste your code into the form
- Name the gist and the file appropriately and click `Create secret gist`.
- Finally, mark this activity as completed (at the bottom of this page) and please copy/paste the *entire* browser URL for your gist (from *gist.github.com*) into the text field.

✖ Cancel Submission

←

Previous  
Kata 13 - Talking Calendar (Stretch)

Next  
Kata 15 - Organizing Instructors (Stretch)

→

## How well did you understand this content?

Thank you for your feedback



Totally got it!























Please give us some written insight into your feedback

# Prep Work

- › 1: Welcome
- › 2: Dev Environment
- › 3: Version Control
- › 4: Programming Intro
- › 5: The Browser

6: Katas

6 hrs + 29 hrs stretch

|  |   |
|--|---|
|  <u>Katas</u>   | ✓ |
|  <u>Kata 1 - Sum the Largest Numbers</u>              | ✓ |
|  <u>Kata 2 - Conditional sums</u>                     | ✓ |
|  <u>Kata 3 - Vowels</u>                               | ✓ |
|  <u>Kata 4 - Instructors Names</u>                    | ✓ |
|  <u>Kata 5 - Percent Encoded String</u>               | ✓ |
|  <u>Kata 6 - SmartParking</u>                         | ✓ |
|  <u>Kata 7 - In the Air Tonight</u>                   | ✓ |
|  <u>Kata 8 - Repeating Numbers</u>                    | ✓ |
|  <u>Kata 9 - Case Maker</u>                          | ✓ |
|  <u>Kata 10 - Multiplication Table</u>              | ✓ |
|  <u>Kata 11 - Bouncy Castles</u>                    | ✓ |
|  <u>Kata 12 - The Great Codeville Bake-off</u>      | ✓ |
|  <u>Kata 13 - Talking Calendar</u>                  | ✓ |
|  <u>Kata 14 - Change Calculator</u>                 | ✓ |
|  <u>Kata 15 - Organizing Instructors</u>            | ✓ |
|  <u>Kata 16 - Case Maker II</u>                     | ✓ |
|  <u>Kata 17 - JS Object From URL Encoded String</u> | ✓ |
|  <u>Kata 18 - Square Code</u>                       | ✓ |
|  <u>Kata 19 - Queen Threat Detector</u>             | ✓ |
|  <u>Kata 20 - Taxicab Geometry</u>                  | ✓ |
|  <u>Kata 21 - Number Guesser</u>                    | ✓ |

7: Stretch Project

8: The Lab Manual

9: Day One Prep

10: Collab Tools Setup

POWERED BY

