

## Summary

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Write a simple JavaScript application that given a number of pennies will calculate the minimum number of Sterling coins needed to make that amount.

Eg. 123p = 1 x £1, 1 x 20p, 1 x 2p, 1 x 1p



The screenshot shows a web application titled "Coinage v1.0". It features an input field labeled "Enter monetary value for coin conversion." with the value "3.65" entered, and a "Convert" button. Below the input, a status message says "Converting 365 pennies into coins." (Note: 3.65 \* 100 = 365). A table displays the results of the conversion:

Coin	Amount
1p	1
2p	7
50p	1
£1	1
£2	1

At the bottom of the interface, it says "© Coinage 2014".

## Requirements

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- The user interface should consist of an input field that accepts an 'amount' string (Eg. 92p, £2.12) and displays the denominations needed when the user hits 'enter'.
- Account for only the common £2, £1, 50p, 20p, 2p and 1p coins. Ignore £5 coins.
- You are limited to using JavaScript, CSS and HTML to do this. Your solution must use AngularJS, but may employ other Javascript libraries as needed.
- The running application may not use server-side code or browser plugins. You may use node.js and related libraries to prepare or create the files needed to run the app (build, etc.).
- All the files required to run the app should be created.
- The application must work in the latest version of Chrome, Firefox, IE10+, and on iOS (phone; Chrome or Safari) or Android (any phone; Chrome)

## What we are looking for

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- Use of best practice JavaScript development, testing techniques
- Proof that the application supports all the defined behaviours
- Code organization, logical separation of functionality
- Accessible, semantic, valid HTML.
- Clean CSS.
- Extensible user input parsing and validation.

## Input Data

In the first column is a string of user input, and in the second the desired integer expressed as pence.

input	pence (canonical)	description
4	4	single digit
85	85	double digit
197p	197	pence symbol
2p	2	pence symbol single digit
1.87	187	pounds decimal
£1.23	123	pound symbol
£2	200	single digit pound symbol
£10	1000	double digit pound symbol
£1.87p	187	pound and pence symbol
£1p	100	missing pence
£1.p	100	missing pence but present decimal point
001.41p	141	buffered zeros
4.235p	424	rounding three decimal places to two
£1.257422457p	126	rounding with symbols

Likewise, the application should not accept the following inputs,

input	pence (canonical)	description
	0	empty string
1x	0	non-numeric character
£1x.0p	0	non-numeric character
£p	0	missing digits