

Watching week4 videos would be helpful to do this homework. These videos are about regular expressions. The only way to come up with a good regular expression for a given requirement is to test it against various input strings. In the video regexp-rbp, I also show how I would write code for HW2 and how I would use a regular expression to allow or disallow usernames. I also show how to send custom error messages back to the client and have it displayed on the browser with minimal modifications to existing code.

Your task for this homework is to write one or more regular expressions to verify that a given string contains:

- (1) a valid currency
- (2) a valid date
- (3) a valid telephone number

and it does not contain any html opening tags such as `` or closing tags such as ``

Here are some examples of a valid currency:

\$954.49
\$10,724.00
\$1,000,000,023.45
-\$250,000,456
+\$234,922.99
USD45M
\$25K
\$4B

Here are some examples of valid dates:

January 05, 1960
6/1/00
04-Jul, 2004
2021-20-01

Here are some examples of valid phone numbers:

6012664949
+1 601 266-4949
(601)-266-4949
001-601-266-4949

You can assume all valid values would look similar to the examples shown above. Write 4 different modules and name them as `currency.js`, `date.js`, `phone_numbers.js` and `tags.js`. Create an `index.js` file and import what you need from each module. Create an `input.txt` file and use `fs` to read it. Copy paste the above examples into `input.txt` and add additional text to each line. For example, you could type, "January 05, 1960 was a cold day, I suppose" and "I do remember 04-Jul, 2004!!". Add examples for 4 different html tags.

Put all the files in directory `YourName_HW4`. I will run your file from the commandline like `node YourName_HW4`. Your code should print the input line and output of either `re.exec` or `str.match` for each input line. If you use more than one regular expression for processing each type of string then output each result.