## Coding Challenge

Email Parsing.

A new feature has been requested in a product you are working on. The software will need to handle emails received in a given address and start a workflow based on the content of the message.

You don’t need to worry with the architecture of this process, you have just been assigned to write a function that can read an email and output the parsed content.

The email message will have statements like:

10 May 2021: 9.130

11 May 2021: 12500

12 May 2021: 140.25

Your function needs to output an object (dictionary) of dates and values, and the mean of values in the same message:

|  |
| --- |
| {  “sender”: “email@example.com”,  “values”: {  “2021-05-10”: 9.130,  “2021-05-11”: 12500,  “2021-05-12”: 140.25  },  “mean”: 4216.46  } |

We need to consider that email content is not well enforced, and users may send messages with their signatures, use a different date format or number format. You don’t need to cover every possible scenario (it would be almost impossible), but we are curious to see flexible solutions (using string manipulation only).

Ideally you code should cover error handling, testing and documentation. Feel free to use external libraries if necessary. Your code could be exported as a package depending on the language you use, and you can add examples describing how to execute the task.

*Minimum solution acceptable*:

* Code works for the example provided
* Documentation explains how to execute the code
* Candidate added at least a basic unit test
* Code is well structured and formatted

Bonus Points:

* Creative string parsing
* Support different data formats
* Test failed scenarios
* Use linter/formatter
* Use types definition
* Can be installed as a package