



For the next phase of interviews, we request that candidates complete the coding assignment below and submit their response by email within 48 hours (2 days) of receipt. This assignment should take about one hour for candidates familiar with Ruby, and no more than about three hours for candidates who are unfamiliar with Ruby.

If you anticipate that this timeframe isn't going to be possible for you within the next 48 hours, please don't hesitate to reach out to your contact at Indiegogo. We're happy to work around extenuating circumstances.

NOTES

If you don't have Ruby and/or Ruby-on-Rails on your machine, they can be installed by following these directions: <http://installfest.railsbridge.org/installfest/>. Please indicate the version of Ruby you are running when you submit your assignment. You can get this from the command line with

```
$ ruby --version
```

Feel free to search the internet for basic Ruby syntax and usage questions. Do not use the internet for algorithm implementations.

ASSIGNMENT

Implement a RPN evaluator in Ruby. It should be able to evaluate the following strings and answer with the corresponding numbers:

- "1 2 +" = 3
- "4 2 /" = 2
- "2 3 4 + *" = 14
- "3 4 + 5 6 + *" = 77
- "13 4 -" = 9

And should provide an error message for the following types of errors

- "1 +" (not enough arguments)
- "a b +" (invalid number)

We should be able to evaluate a string from the command line in the following way:

```
$ ruby rpn.rb "1 2 +"
```

Implement your own string to number conversion function. Do not use the following: `send`, `eval`, `to_i`, `to_f`, `Integer(str)`, `Float(str)`, or any similar method to convert your strings to numbers in your RPN evaluator.

- You will definitely need `"atoi"` - converts an ASCII string to an integer. E.g., `atoi("251")` returns the integer 251.
- You may also need `"atof"` - converts an ASCII string to a float. E.g., `atof("341.72")` returns the float 341.72.