

Task A: Result prediction API

- Written with Ruby & Rails or Elixir & Phoenix
- Assume this is a part of a bigger project rather than as a code kata
- Supports JSON
- Exposes a single API end point to provide the prediction function as detailed below.

Prediction:

Given two team names, return probability (two digits) that the first team defeats the second one.

The probability is worked out by finding the number of times each of the characters in the word DEFEATS appears in the team names. This should result in your first number made of 7 or more digits. To obtain the next number in the series you should add each sequential pair of digits together to form the next number like so:

```
1  2  3  1
  \  \  \
 3  5  4
```

Repeat this process until you are left with only 2 digits.

Example:

Virtus Pro & Ninjas in Pyjamas

```
D E F E A T S
0 0 0 0 3 1 3
```

000344

00378

031015

34116

7527

1279

3916

12107

3317

648

1012

113

24%

Task B: Test client

- Written with a different language to Task A
- Should be available from the command line
- Reads the test input file attached and calls the API from Task A for each test case (row) in the input file
- The team names are separated by a single ampersand (&)
- For each test case returns T if greater than 50% chance, otherwise F
- Final output should be a string of all tests concatenated. For example: TTFFFTFF