

OpenBook Assessment Test -2

March 2, 2019

1 OpenBook Assessment Test -2

Duration: 90 mins

Please type python programs for the following. Once done please move all the code files to a folder in your name. Compress the folder and email it to the coordinator.

Q1: Program to find the longest common prefix between a set of words

input: {'amerigo', 'americ', 'ame', 'america'}
output: 'ame'.

Q2: Write a unit test script to test the functionality, both positively and negatively, of **Q1**, for below test cases:

Test Case 1: `sample_data = {'amerigo', 'americ', 'ame', 'america', 'ame'}`

Test Case 2: `sample_data = {'apple', 'ape', 'april'}`

Q3: Write a function which works out how old a child should be to know a certain word. The classification should be based on the length of the word, as follows:

- 5 years <= 3 letters
- 6 years <= 4 letters
- 8 years <= 6 letters
- 10 years <= 10 letters
- 12 years = any length

Child name should be taken in command line, when executing script.

Q4: Write a script which executes the script written for **Q3**.

Execute that script for the child names:

'Achilles', 'Adonis', 'Ajax', 'Aphrodite', 'Apollo', 'Argus', 'Atalanta', 'Athena', 'Atlas', 'Calista',
'Diana', 'Edda', 'Electra', 'Freya', 'Hector', 'Helen', 'Hercules', 'Janus', 'Jason', 'Morpheus', 'Narcissa',
'Thor', 'Ulysses', 'Venus', 'Zeus'

Q5: Login to kaggle.com website and download the json dataset at <https://www.kaggle.com/rmisra/news-headlines-dataset-for-sarcasm-detection/version/1>

In all those records, get all the headlines for which `is_sarcastic = 1`, combine them, and get the rank (based on no. of times repeated) for each word, among them.