

PYTHON WORKSHOP CHALLENGE QUESTIONS: ASTRONAUTS, ETC.

Challenge problems for today re: astronauts:

1. Decide how you want the computer to grade the essays available in the essays folder here:

<https://github.com/stackmaps/astronauts>

and then write a Python program which grades the essays.

2. Make your program handle **both** English- and Spanish-language essays.
3. Test your program on other data.
4. Write a web interface in Flask which lets the user upload an essay (in .txt format), grades the essay, and then provides a summary report to the user.
5. Write a program which ingests an essay and checks it for plagiarism (plagiarism means the essay contains material written by someone else but not credited or cited, e.g., plagiarism is when a person uses someone else's work but passes it off as the author's own work).

Challenge problems for today re: math:

6. Write a program to help a student learn how to factor polynomial equations. Example:
What are the factors of

$$2x^2 - x - 21 = ?$$

The program should generate problems and ingest user-submitted answers.

A command-line program is absolutely fine.

7. Build an interface (in Flask or tkinter or something else) which displays a math factoring problem to the user and lets them input an answer. Check whether or not the answer is right. Tell the user how they did.