Practical Regex: Implement re & colorama

Eckel, TJHSST AI2, Spring 2023

Background & Explanation

After learning some about regular expressions in class, for this assignment you'll be actually importing the Python libraries necessary to re-create our class activity in a real program. This will set the stage for increasingly complex & useful practical applications of regular expressions in later assignments. For now, let's make sure we understand the tools.

If you don't have the colorama package installed, you'll need to do that. Probably this just means typing:

> pip install colorama

...at your terminal of choice; if that doesn't work or you need help, let me know. You don't need to install re – it comes with Python.

Assignment

Look over the colorama & re demo file on the course website. Let me know if you have any questions.

Note well the discussions of init(), raw text, compiled regex objects, and match objects.

Your task here is to recreate the highlighting activity from class. Specifically, I'll provide a single command line argument that is a regex formatted in the standard way – like "/e.e/im" – as a raw text string. In between the forward slashes will be the regex itself, with flags specified after the second forward slash. Your code will need to run that regex on the text given in class (which has been included in the demo file so you don't need to recreate it).

So, for example, this:

```
> your script.py /wh/i
```

Should produce output that looks like this in the console:

```
While inside they wined and dined, safe from the howling wind.
And she whined, it seemed, for the 100th time, into the ear of her friend,
Why indeed should I wind the clocks up, if they all run down in the end?
```

You also must add one additional feature, to make readability easier. If two matches are immediately adjacent to each other I would like a different color to be used. Only use the second color if it is necessary to clarify the situation. So this:

```
> your script.py /se|em|ed/
```

Should produce output that looks like this in the console:

```
While inside they wined and dined, safe from the howling wind.
And she whined, it seemed, for the 100th time, into the ear of her friend, Why indeed should I wind the clocks up, if they all run down in the end?
```

Note the other color is only used when necessary for clarity.

I don't care which colors you use to highlight, as long as I can still read the text!

Specification

Submit a single Python script to the link on the course website.

This assignment is **complete** if:

- You follow the instructions on the submission form to format your submission properly.
- Your code operates exactly as specified above, with no additional print statements.