

day41 acronym generator

Due: Monday 12/4/23

Your task: write a program that creates an acronym from any user-entered phrase.

An acronym is made by taking the first letter of each word, for example, "Portable Network Graphics" is the phrase behind the acronym PNG, and the Joint Photographic Experts Group is what is behind JPG and JPEG, a file extension used for photos. PDF stands for "Portable Document Format".

Your program should do the following:

1. Ask the user for a phrase
2. Print out the all-caps acronym generated by that phrase.
3. Repeat. If the user enters nothing for the phrase, you quit.
4. Once you have it all working, run three phrases through your system and put all the output in triple quotes at the end of your program.

Some helpful tips:

- Make what the user entered all uppercase before you try to make the acronym: `phrase = phrase.upper()`
- You can split a phrase into separate words using this command: `phrase = phrase.split()`
This changes the variable `phrase` from a string (just text) to a list where each word is a separate string. Try it, then print out the variable if you want to see what I mean.
- Create an empty output variable where you'll put the acronym letters.
For example, `output = ""` (that's empty quotes, not quotes with a space.)
- Then you can say "`for word in phrase:`" to start a for loop where each word will be put into `word`, one at a time.
- You can get the first letter from each word and put that letter onto the end of the output variable like this: `output = output + word[0]`, the `word[0]` is grabbing the first character.
- After the for loop, print the output variable.
- The whole thing should be in a while True: loop
- Do not ask if they want to run again. Instead, add an if statement immediately after the input line, and if they enter nothing, break.
- Add an if statement to ignore the following small words: "of", "the", "at" and "and". For example, the United States of America is usually referred to as USA, not USOA. You can do this, plus eliminate other short words like this:

```
if word not in "AND THE AT OF".split():
```

Sample run:

```
Please enter a phrase and I'll turn it into an acronym:
```

```
portable document format  
PDF
```

```
Please enter a phrase and I'll turn it into an acronym:
```

```
large incredibly green elder ray-banned surfers  
LIGERS
```

```
Please enter a phrase and I'll turn it into an acronym:
```

```
Thanks, goodbye.
```