

# Gratitude Daily Reminder App

## Goals

- Output information, Utilize arithmetic operators, Utilize various list techniques, Utilize conditional statements, Utilize File I/O to read and write files, Utilize loops to repeat certain code blocks, Utilize functions to streamline logic and code
- Build program that gives user custom thing to be grateful for depending on the date they enter.
- Create bank of 50 things to be grateful for, and assign each day of the year a thing in order, starting over at the first thing once reaching the end of the list.
- Store bank of things to be grateful for in separate file and read from that file to the main program.
- Allow the user to add their own things to the bank or remove things from the bank.

## Overall Description

- I plan on creating a program that accepts user input for what the calendar date is and outputs a thing to be grateful for (e.g. "I don't currently have a torn ACL.") to the user. It will start with an existing bank of 50 things in a separate file. The user will first be shown the list of things and asked if they want to remove any or add any of their own. If they do, the existing bank will be modified. Once the user approves the list, the program will ask for user for a calendar date. The program will read out from the bank file, starting at January 1<sup>st</sup> as the first item in the list and restarting at the beginning of the list once it reached the end.

## Requirements

- Create a new python file for the main program
- Create a second python file and fill it with a bank of 50 things to be grateful for
- Begin by telling the user what the program is
- Then read out the current bank of things to be grateful for to the user as a numbered list
- Then give the user a menu with three options, and loop it until the user chooses to exit

- Add item to bank (and end of list)
    - Program must ensure the item is a string of acceptable length by number of characters
  - Remove item from bank (by specifying it by number)
    - Program must make sure the number exists within the current bank
  - Exit
- The program should save the user's modifications to the word bank file
  - After the user is done modifying the bank, the program should prompt the user for a calendar date, and loop until the user chooses to exit
  - All inputs must be case insensitive
  - All inputs should be error-checked by program

## Sample Output

### Starting Bank File:

I don't have a torn ACL currently.

I have access to running water.

I don't have cancer.

I can afford to attend college.

.

.

.

\*continued for 50 lines\*

### Sample Output 1:

Welcome to the Daily Reminder Gratitude App.

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Here is the current gratitude bank:

1. I don't have a torn ACL currently.
2. I have access to running water.
3. I don't have cancer.
4. I can afford to attend college.
- .
- .
- .
- 50..

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What would you like to do?

1. Add item to bank.
2. Remove item from bank.
3. Exit

Choice: 1

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What gratitude would you like to add? 3

Please enter a sentence.

What gratitude would you like to add? I have never lost my house in a hurricane.

This gratitude has been added to the bank.

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What would you like to do?

1. Add item to bank.
2. Remove item from bank.
3. Exit

Choice: 3

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What is the current date? Please enter in the format MM/DD. Enter "00/00" to exit: March 7<sup>th</sup>

Please enter the date in the format MM/DD.

What is the current date? 01/02

Today's gratitude: I have access to running water.

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What is the current date? 01/03

Today's gratitude: I don't have cancer.

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What is the current date? 02/20

Today's gratitude: I have never lost my house in a hurricane.

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What is the current date? 02/21

Today's gratitude: I don't have a torn ACL currently.

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What is the current date? 00/00

We hope you have been able to develop a greater appreciation of your life. Goodbye!

### Sample Output 2:

Welcome to the Daily Reminder Gratitude App.

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Here is the current gratitude bank:

1. I don't have a torn ACL currently.
2. I have access to running water.
3. I don't have cancer.
4. I can afford to attend college.

.  
.  
.

50..

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What would you like to do?

1. Add item to bank.
2. Remove item from bank.
3. Exit

Choice: 2

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What gratitude would you like to remove? I don't have a torn ACL currently.

Please enter the number of the gratitude rather than the gratitude itself.

What gratitude would you like to remove? 51

Please enter a number within the current bank.

What gratitude would you like to remove? 2

This gratitude has been removed from the bank.

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What would you like to do?

1. Add item to bank.
2. Remove item from bank.
3. Exit

Choice: 3

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What is the current date? Please enter in the format MM/DD. Enter "00/00" to exit: March 7<sup>th</sup>

Please enter the date in the format MM/DD.

What is the current date? 01/02

Today's gratitude: I don't have cancer.

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What is the current date? 01/03

Today's gratitude: I can afford to attend college.

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What is the current date? 02/19

Today's gratitude: I don't have a torn ACL currently.

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What is the current date? 02/20

Today's gratitude: I don't have cancer.

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What is the current date? 00/00

We hope you have been able to develop a greater appreciation of your life. Goodbye!