# Lab: Files

## Background

Text files can be used to read data in your program or to write save data generated by your program.

## Instructions

Use Python IDE to create a solution for the scenario presented in each question.

Gifts have started to arrive for Bo and Krista’s upcoming nuptials. They want to keep track of the gifts as they arrive and use the information later to write thank-you notes. You have been given a text file with a few of the gifts that have already arrived.

File: weddingGifts.txt (in Brightspace)   
Tab delimited file with the following data fields: gift from, gift type, cash amount, gift description

For each of these questions, use functions (at least a main())

#### Gift Report

Bo and Krista want to keep track of how many gifts they and received and the total cash.

Write a program that reads in a file of gift information, counts the number of gifts in the file and accumulates the total cash gifts and prints the following report

File: weddingGifts.txt (in Brightspace)   
Tab delimited file with the following data fields: gift from, gift type, cash amount, gift description

Sample Run: (no input)

Received 6 gifts including cash of $1,550.00

1. **Gift Registry**

Use the same file as the previous question. Write a program that allows Bo and Krista to add new gifts to their registry as they arrive. The program should continue to run as long as the answer to the question “Another gift? (Y/N): “ is ‘Y’.

Prompt for gift from and gift type. Valid gift types are ‘Cash’, ‘Gift’, or ‘Both’. Depending upon the gift type, prompt for cash amount, gift description or both. See sample run for more details.

For each gift entered, write a line to the gifts file.

Sample Run: (user input in bold underline)

Gift Registry

Another gift? (Y/N): **y**

Who is this gift from: **James K.**

Enter gift type (Cash, Gift, Both): **gift**

Enter description of gift: **pottery chip/dip platter**

Another gift? (Y/N): **Y**

Who is this gift from: **Uncle Fred and Janine**

Enter gift type (Cash, Gift, Both): **cash**

Enter amount of cash gift: **65**

Another gift? (Y/N): **y**

Who is this gift from: **Auntie Em**

Enter gift type (Cash, Gift, Both): **Both**

Enter amount of cash gift: **200**

Enter description of gift: **$50 gift card for Earl's**

Another gift? (Y/N): **N**

File successfully written

Once you have added all the new gift information. Rerun the first program to make sure that it still works correctly.

Received 9 gifts including cash of $1,815.00

# Reference

Linge, S. and Langtangen, H. P. (2020). Programming for computations – Python: A gentle introduction to numerical simulations with Python 3.6. (2nd ed.). Springer Open. ([CC BY-SA 4.0](https://creativecommons.org/licenses/by/4.0/deed.en)). Retrieved from https://library.oapen.org/viewer/web/viewer.html?file=/bitstream/handle/20.500.12657/23103/1007055.pdf