

Account Verification

Create a program to allow users to create an account. The user should give the following:

- First name
- Last name
- Email address
- Age

Make sure that each input is valid. For example, the age cannot be a string and the first and last name cannot be numbers. If the user enters an invalid input, prompt them to re-enter it.

Challenges:

- Try to verify email addresses (emails should have the @ symbol)
- Store the information in a text file
- See where you can implement functions

Sample Output

```
Would you like to create an account (Y/N)? Y
What is your first name? 123
That is not a valid first name. What is your first name? Computer
What is your last name? Science
What is your email address? computerscience@example.com
What is your age? 19
Thank you for creating an account!
```

Class Attendance

Create a program for teachers to be able to take attendance faster. Suppose we have a class of 10 students, all with different first names. If the student is here, then they will receive a “Y” for attendance. If the student is not here, then they will receive a “N” for attendance.

Note: There may be different ways to implement this.

Challenges:

- Try to implement last names
- If a student walks in late, give them a “T” for Tardy
- Have the attendance sheet print out in a text file

Sample Run

```
Floyd? Y
Rolando? N
Freddie? Y
Carmen? Y
Denise? Y
Van? Y
Myra? N
Jacquelyn? Y
Kathy? Y
Harvey? N
```

The attendance sheet is:

Name	Attendance
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Floyd	Y
Rolando	N
Freddie	Y
Carmen	Y
Denise	Y
Van	Y
Myra	N
Jacquelyn	Y
Kathy	Y
Harvey	N

Calculator Program

Create a program where a user can select between the following: +, -, *, and /. Have the user input 2 numbers and perform the arithmetic operation. The user should then be asked if they want to perform another operation. If the user says yes, then repeat everything. If the user says no, then exit the program.

Sample run

```
What operation do you want to perform (+, -, *, /): +  
Enter the first number: 2  
Enter the second number: 3  
The answer is 5.  
Would you like to continue? N
```

Shorter Programs

1. Store all even numbers in an array and print it out.
2. Store all odd numbers in an array and print it out.
3. Read in 5 values from a text file and print it out each value multiplied by 2. (Each value in the text file will be separated by spaces).
4. Print out a multiplication table up to 10.

This example goes up to 5:

	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25