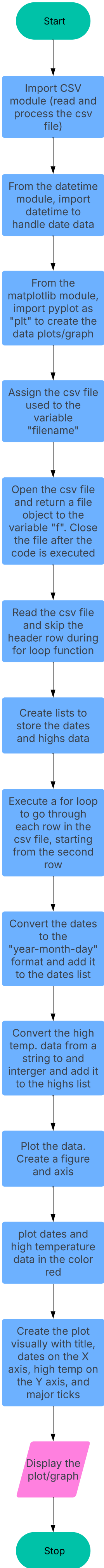Jonah Aney CSD325 Module 4.2 Assignment: High/Low
Temperatures: Flowchart of original program

Jonah Aney CSD325 Module 4.2 Assignment: High/Low
Temperatures: Flowchart with program changes

**Left flowchart (original program):**

Start

↓

Import CSV module (read and process the csv file)

↓

From the datetime module, import datetime to handle date data

↓

From the matplotlib module, import pyplot as "plt" to create the data plots/graph

↓

Assign the csv file used to the variable "filename"

↓

Open the csv file and return a file object to the variable "f". Close the file after the code is executed

↓

Read the csv file and skip the header row during for loop function

↓

Create lists to store the dates and highs data

↓

Execute a for loop to go through each row in the csv file, starting from the second row

↓

Convert the dates to the "year-month-day" format and add it to the dates list

↓

Convert the high temp. data from a string to and interger and add it to the highs list

↓

Plot the data. Create a figure and axis

↓

plot dates and high temperature data in the color red

↓

Create the plot visually with title, dates on the X axis, high temp on the Y axis, and major ticks

↓

Display the plot/graph

↓

Stop

**Right flowchart (program with changes):**

Start

↓

Import CSV module (read and process the csv file)

↓

From the datetime module, import datetime to handle date data

↓

From the matplotlib module, import pyplot as "plt" to create the data plots/graph

↓

Assign the csv file used to the variable "filename"

↓

Open the csv file and return a file object to the variable "f". Close the file after the code is executed

↓

Read the csv file and skip the header row during for loop function

↓

Create lists to store the dates, high and low temp. data

↓

Execute a for loop to go through each row in the csv file, starting from the second row

↓

Convert the dates to the "year-month-day" format and add it to the dates list

↓

Convert the high temp. data from a string to and interger and add it to the highs list

↓

Convert the low temp. data from a string to and interger and add it to the lows list

↓

Display message to user: "Hello! You can choose to see high or low temperatures for 2018." "Would you like to see the highs or lows? Or enter quit to exit the program."

↓

Confirm user's choice

↓ IF

User chooses high, create a figure and axis

↓

plot dates and high temperature data in the color red

↓ ELIF

If user chooses low, create a figure and axis

↓

plot dates and low temperature data in the color blue

↓ ELIF

If user chooses quit:

↓

Display: Goodbye!

↓ ELSE

Display: "Please enter 'high' or 'low' as your choice. Or enter quit to exit the program."

↓

Create the plot visually with title, dates on the X axis, high or low temp on the Y axis, and major ticks

↓

Display the plot/graph

↓

Stop