CS128 Lab#2

Task1: Prompt for the temperature in Fahrenheit degrees. Read in the value as a float. Convert the Fahrenheit temperature to Celsius by subtracting 32 and then multiply by 5/9. Be careful about operator precedence. Output the Celsius value with 2 digits after the decimal point. Hint {:.2f}

Example #1:

```
enter fahrenheit temp:78
78.0 f = 25.56 c
```

Example#2:

```
enter fahrenheit temp:24
24.0 f = -4.44 c
```

s

Add your name to the Google Doc to get checked off for task1.

Task2: Prompt for the total number of days.Use the floored division and mod operators to convert to equivalent years, weeks, and days.Don't worry about plural or singular spelling.

1. Compute the number of years based on the total number of days entered by the user. Store in a variable.
2. Compute the number of days in the partial year (remainder). Store in a variable.
3. Compute the number of weeks based on the days in the partial year. Store in a variable.
4. Compute the number of days in the partial week (remainder). Store in a variable.
5. Print the results.

Example #1:

```
Total number of days:845
845 days is equivalent to 2 years 16 weeks 3 days
```

Example#2:

```
Total number of days:200
200 days is equivalent to 0 years 28 weeks 4 days
```

Add your name to the Google Doc to get checked off for task2.

Task3:

NOTE: You must run the first cell in the notebook to import Canvas.

The existing code draws a 400x400 canvas, then draws a beige filled rectangle to fill the canvas drawing area. Update the code to draw the shapes shown below. Keep in mind 0,0 is at the upper left corner of the canvas, and 400,400 is the lower right corner.

Try adding one geometric shape at a time to the drawing:

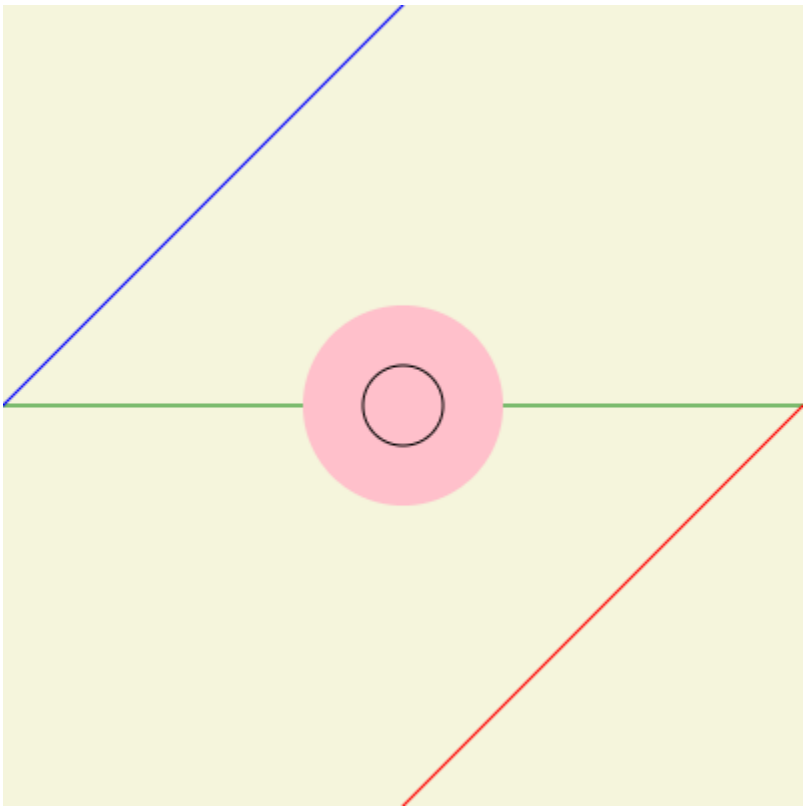
1. green horizontal line

2. blue diagonal line

3. red diagonal line

4. pink filled circle centered in canvas with radius 50

5. black framed circle centerd in canvas with radius 20



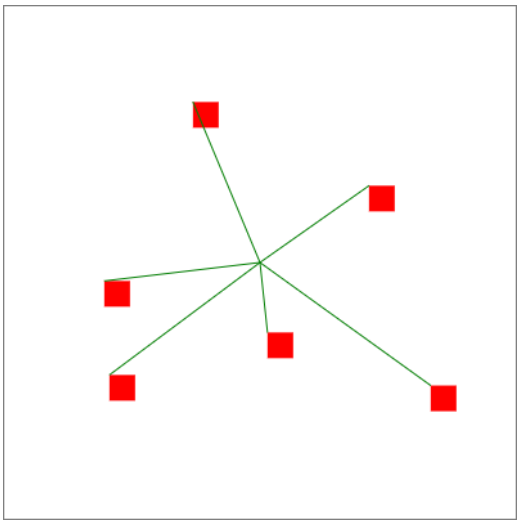
Add your name to the Google Doc to get checked off for task3.

Task4a:

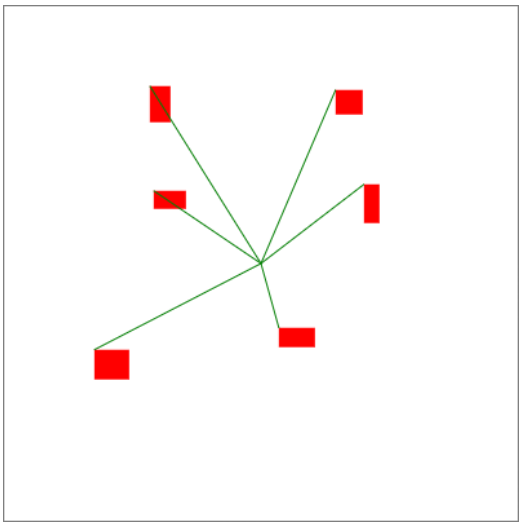
The main algorithm code creates a 400x400 drawing canvas, draws a black framed rectangle around the canvas area, and sets up the mouse down event to call the handle_mouse_down function. Add code to the **handle_mouse_down** function:

(1) Draw a red filled rectangle using the mousedown x,y coordinate, along with a height and width of 20.

(2) Draw a green line from the mousedown x,y coordinate to the center of drawing canvas.



Task4b: Copy the code from task4a. Update the handle_mouse_down function. The width and height of each rectangle should be random a value between 10 and 30.



Add your name to the Google Doc to get checked off for task4.