CMPS 2010 Lab 2

Due Date: Feb 12, 2024

Part 1 (lab2-1.cpp)

Write a madlib program that meets the following requirements:

1. Ask the user for at least 4 different words and store them in string variables
2. Ask the user for at least 1 number and store it in an integer or double variable
3. Ask the user for at least 1 sentence and store it using the getline() function

The output might look something like this:

```
Enter a name: Bob
Enter an occupation ending in er: trucker
Enter an adjective: angry
Enter a verb: spit
Enter a number: 450
Enter an animal (plural): frogs
Enter an excited phrase: I CAN'T BELIEVE IT'S NOT BUTTER!


This is the tale of Bob the trucker.
One day Bob felt angry, so they decided to spit.
But right when Bob was about to spit they encountered a pack of 450 wild frogs!
Bob ran away screaming "I CAN'T BELIEVE IT'S NOT BUTTER!"

THE END
```

Part 2 - Math and Formatting (lab2-2.cpp)

Write a math program that meets the following requirements:

1. Ask the user for a decimal number and store it in a double variable
2. Complete all of the following calculations using the <cmath> library:
   SIN, COSINE, TANGENT, EXPONENT, LOG, SQUARE ROOT
3. Use the manipulators found in the <iomanip> library to line up the results for your output

The final output should look something like this:

```
Please enter a decimal number: 32.5

SIN:                  0.88387
COSINE:               0.467732
TANGENT:              1.88969
EXPONENT:         1.30188e+14
LOG:                  3.48124
SQUARE ROOT:          5.70088
```

Run this command from your lab2 folder to submit your work.

```
/home/fac/paul/s/submit.sh
```