Homework 02

CS-102 Spring 2022

Homework 2A

- Design a flow chart for a program that you will write.
 - [You will find a YouTube video that will show you how to create a FlowChart using PowerPoint at: https://youtu.be/r5bxbxuExhk.] However, unlike in the video, use consistent names with no spaces in the names.
 - i.e. Don't call a variable **payrate** in one place, but call it **rate** in another. Be consistent!
 - Also don't call a variable gross Pay, but rather call it grossPay or gross_Pay.
- Your program will take as an input the cost of a Meal at a Restaurant.
 - [This can be inputted by use of the statement: **cin >> cost**; (see the first two pages of Chapter 3)].
- Your program then proceeds to compute:
 - The tax charged for the meal,
 - The gratuity charge for the meal (tip),
 - Then the final total bill for the meal to the patron.
- Use 9% for the tax rate (0.09),
- Use 20% for the tip rate (0.2).
 - The tip is calculated by first adding the tax for the meal to the meal cost, then the tip rate is applied to that sum.
 - In your program, define double floating point variables for the meal cost, the tax, the tip, and the total bill.
 - Define as double floating point constants, the tax rate and the tip rate.
 - Your opening output greeting should have your name in it.

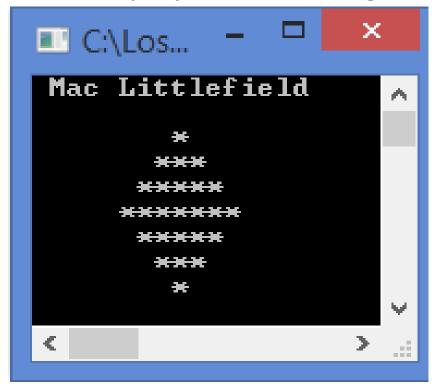
Homework 2A cont.

- Note: Be sure to include your name as a comment in the program, and have it appear clearly on your flow chart as well.
- The name of your program should be: YourName-Hwrk2a.cpp .
- The name of your Flowchart should be: YourName-Hwrk2a.png.
 Submit both to canvas.
- <u>Take Note:</u> Now that we're **using cin >>** statements, you will need two lines at the end of your program to hold the display on the screen, (if you run the program from the console), rather than just **cin.get()** alone. Here they are:

```
cin.ignore();
cin.get();
```

Homework 2B

Write a program that will display the following on the screen.



- Use an escape sequence, to move the display to a new line, & use <u>your</u> name, not mine.
- Please name the program: YourName-Hwrk2b.cpp.