

# 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.
- Take Note: 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 your name, not mine.
- Please name the program: *YourName-Hwrk2b.cpp* .