LAB 07 (Deadline - Friday: 10/07/2022, 11:59pm)

Objective – If statements & loops

INSTRUCTIONS:

The problem is to present menu choices from a restaurant to a customer, and calculate the bill (total of the prices of the items they chose).
The food items available are

Food Item	Price
Grilled Cheese	$7
Nachos	$5
Chicken	$8
Hamburger	$8
Cheeseburger	$10
Hot Dog	$6

Sample run: (one item, a grilled cheese sandwich)

```
Welcome to Dairy King
Please answer each question with y or n
Do you want a grilled cheese sandwich? y
Do you want a serving of nachos? n
Do you want a chicken sandwich? n
Do you want a Hamburger? n
Do you want a hot dog? n
The total for your food is $7.00
The total with 20% tip is $8.40
Thank you for your business!
```

Sample run: (two items, a hamburger and hot dog)

```
Welcome to Dairy King
Please answer each question with y or n
Do you want a grilled cheese sandwich? n
Do you want a serving of nachos? n
Do you want a chicken sandwich? n
Do you want a Hamburger? y
Do you want cheese on that? n
Do you want a hot dog? y
The total for your food is $14.00
The total with 20% tip is $16.80
Thank you for your business!
```

Sample run: (two items, nachos and a cheeseburger)

```
Welcome to Dairy King
Please answer each question with y or n
Do you want a grilled cheese sandwich? n
Do you want a serving of nachos? y
Do you want a chicken sandwich? n
Do you want a Hamburger? y
```

Do you want cheese on that? y
Do you want a hot dog? n
.
The total for your food is $15.00
The total with 20% tip is $18.00
Thank you for your business!

Description	**Input 5 or 6 y's and n's**	**Expected Output Total, Total+Tip**
Example	*y,y,n,n,n*	$12, $14.40
Only one item, not hamburger	n,y,n,n,n	___A.___
Only one item, hamburger, no cheese	n,n,n,y,n,n	___B.___
Three items desired	y,y,y,n,n	___C.___
No item desired	n,n,n,n,n	___D.___
All items, including cheese	y,y,y,y,y,y	___E.___

```
'''
Purpose:  offer the user a choice of food items, calculate total bill
Pre-conditions:  user enters 5 or 6 y's or n's depending on desired items (strings)
Post-conditions:  prompts for choices, total bill before (float) and after tip, (float)
  and parting message.
'''
  # name of restaurant
  # give user instructions of expected inputs
  # initialize total bill to zero
  # ask first choice
  # if the user desired the item,
      #add price to total bill

complete this part


  # output blank line
```

```
    # output total bill before tip

    complete rest of design
```

Calculating a bill using if statements and a loop for/while

Write a program that will get some input from the user about a visit to a restaurant. The program will calculate the bill for the food items requested.

Prompt the user to input whether or not they want each of the food items. You can assume the input will be a character that is either a 'y' or an 'n'. That is, you can assume that they either enter a 'y' or it's not a 'y'. You don't have to check to see if it IS an 'n'. So if they enter a 'q', treat it like an 'n'. If they enter a 'Y' (upper case), treat it like an 'n'. Print out the total of the bill after all the questions are answered.

Match the sample runs as closely as possible. o Use multi-character meaningful variable names.

You must have a main function with all code inside.

Write this as efficiently as you can, using as few comparisons and if statements as possible, no more than 6 if statements. Note that most of the if's are independent of each other.

This can be done with exactly one else statement in the whole program.

Hint: not every if has to have an else branch. If you find yourself trying to figure out what an else should contain, step back and ask yourself if you need one. You do NOT want to use statements like x = x or x = x + 0!

Hint: each if statement WILL use some quotes, either single or double (your choice). Do NOT define a variable called y which contains 'y'. It is not necessary. You compare a variable to a string constant like this: if myvar == "p":

To calculate the bill (the arithmetic part of the problem) use an accumulator. Just create one variable by setting it to a zero at the start, then add the prices of the options to it as you go.

There is no need to add a zero to it if the user says they do NOT want an option. Use augmented assignment operators (like +=, -=, *=) when useful.

If they say they want a hamburger, ONLY THEN ask them if they want cheese on it. You either add $8 or $10 to the bill. Also calculate a 20% tip and add it on. Format it on output to two places.

Note that the $ is right next to the dollar amounts. Your output should look like that.

Hint: you do not need any typecasts for this program at all. Remember that the input function returns a string always - you don't have to cast its result AS a string.