Do the following exercises:

(1) Using the string "Monty Python"
   1. Write an expression to print the first character, explicitly using the index number
   2. Write an expression to print the last character, explicitly using the index number
   3. Write an expression including the len() function to print the last character
   4. Write an expression that uses slicing and prints "Monty"


(2) Using the string "homebody"
   1. Write an expression USING SLICING to print "home"
   2. Write an expression USING SLICING to print "body"

(3) Ask the user to enter a string. If the string is even length (should work for ANY string)
   1. Use slicing to print out the first half of the string
   2. Use slicing to print out the second half of the string

However, if the string is odd length (should work for ANY string)
   1. Use slicing to print the middle character
   2. Use slicing to print the string up to (but not including) the middle character
   3. Use slicing to print the string from the middle character to the end (BUT not including the middle character)

(4) Let's make code that can replace a letter:  given a string, a character and an index number (use input() for all), create a new string in which the character is put into the string at that index number. DO NOT USE ANY string methods to do this.  For example:
   1. 'hello','x',0 --> 'xello'
   2. 'hello','a',4 --> 'hella'
   3. 'hello','g',1 --> 'hgllo'

(5) Ask the user to enter a sentence. Split that sentence into words. Go through the words one at a time, and change the first letter of every word into a 'z'. and print it out E.g.
If the input is "hi my name is nick", I should get:
zi
zy
zame
zs
zick


(6) Way back in problem set 2, I had you write something that performed FIVE transactions for a store. The user entered a value, and you printed the subtotal (the sale plus tax) and the running total so far. I want you to reimplement that using a while loop. The steps are:

- ask the user how many transactions there will be

- for each transaction, get the sale prince

- calculate the sales tax (we'll assume 7% tax)

- print the subtotal (the sales price plus tax)

- print the current purchase total so far (the sum of the subtotals to this point).

At the end, print the total purchase price. You MUST use a while loop to do this.