1. Write a Python program which repeatedly asks the user to enter a number n

and then repeatedly applies the following rules until n == 1.

if n is divisible by 2 then divide it by 2

otherwise if n is divisible by 3 then divide it by 3

otherwise multiply it by 5 and add 1

e.g.


```
enter n: 7
36 18 9 3 1   more? (y or n) y
enter n: 11
56 28 14 7 36 18 9 3 1   more? (y or n) y
enter n: 13
66 33 11 56 28 14 7 36 18 9 3 1   more? (y or n) n
```


2. A certain bank offers 4.15% interest on savings accounts, compounded annually. Create a table that shows how much money a person will accumulate over the number of years that they want to save their money for. Assume that the person makes an initial investment of $1000 and deposits $100 each year after the first. Your table should indicate for each year the current balance, the interest, the new deposit, and the new balance. For example:

```
For how many years do you want to save? 4
Year       Curr Balance      Interest   New Deposit       New Balance
0          1000.0            41.5       100.0             1141.5
1          1141.5            47.37      100.0             1288.87
2          1288.87           53.49      100.0             1442.36
3          1442.36           59.86      100.0             1602.22
```


3. Write a program that determines if a string is palindrome. A palindrome string is a string that reads the same backward as forward. For example: "ABA", "madam", "abba". Prompt the user for a string and validate if the string is a palindrome. Your program should return True if the string is palindrome, False otherwise. Assume the string the user entered has no punctuations and spaces.