

Lab 2: Strings and Math  
June 14, 2022

Description: The following problems below are small examples of the things that we have learned in the last week. Whenever you finish one of the problems, raise your hand or call me to your computer so we can check the problems together. Using techniques and functions/methods we have learned in class, try to do them in as few lines of code as possible.

1. Write a Python program which accepts the radius of a circle from the user and compute the area and circumference of the circle.

Remember:  $\text{Area} = 2(r^2)$   $\text{Circumference} = 2d$

2. Write a python program which accepts the user's first and last name and prints them in reverse order with a space between them.
3. Write a Python program that accepts an integer (n) and computes the value of  $n+nn+nnn$ .

Input: 5

Output: 30

4. Write a Python program to find whether a given number (accept from the user) is even or odd, print out an appropriate message to the user.
5. Write a Python program to solve  $(x + y) * (x + y)^2 + 2x$

Input:  $x = 3$   $y = 4$

Output: 349

6. Write a Python program to convert miles (in feet and inches) to kilometers.
7. Write a Python program to ask the user for the current date and time and print the military version of the time.

Input: Date: 06/19/2022

Time: 08:20 pm

Output:

"Hey Soldier, The time is HH:MM and today's date is MM/YY!"

8. Write a python program that makes an input sentence all caps and replace every 'a' with a '8' and an 'e' with a '3'. (Hint: The `.replace(old, new)` method will be useful.

Input:

What are you doing today? Eating pizza and juice!

Output:

WH8T 8RE YOU DOING TOD8Y? 38TING PIZZ8 8ND JUIC3!

