## Practice

- O1 People often forget closing parentheses when entering formulas. Write a program that asks the user to enter a formula and prints out whether the formula has the same number of opening and closing parentheses.
- Write a program that asks the user to enter a word and prints out whether that word contains any vowels.
- Write a program that asks the user to enter a string s and then converts s to lowercase, removes all the periods and commas from s, and prints the resulting string.
- 04 Write a program that asks the user to enter a word and determines whether the word is a palindrome or not. A palindrome is a word that reads the same backwards as forwards.
- Write a function called closest that takes a list of numbers L and a number n and returns the largest element in L that is not larger than n. For instance, if L=[1,6,3,9,11] and n=8, then the function should return 6, because 6 is the closest thing in L to 8 that is not larger than 8. Return "No Match" if all of the things in L are greater than n.

06

- The GCD (greatest common divisor) of two numbers is the largest number that both are divisible by. For instance, gcd(18, 42) is 6 because the largest number that both 18 and 42 are divisible by is 6. Write a program that asks the user for two numbers and computes their gcd. Shown below is a way to compute the GCD, called Euclid's Algorithm.
  - First compute the remainder of dividing the larger number by the smaller number
  - Next, replace the larger number with the smaller number and the smaller number with the remainder.
  - Repeat this process until the smaller number is 0. The GCD is the last value of the larger number.
- 08 Determine the maximum and minimum frequency character in a given string. (If multiple characters have maximum and minimum frequency print them all)
- 09 Write a Python program to find the list of words that are longer than n from a given list of words.
- Write a function called verbose that, given an integer less than 10<sup>^</sup>, returns the name of the integer in English. As an example, verbose(123456) should return one hundred twenty-three thousand, four hundred fifty-six. (International Method)