

1. Write a program that prompts the user for two numbers. The program will then print out all the numbers between these numbers, including the last number. Assume the first number entered is larger than the second number.

Advanced: Enter 3 numbers, with the third number being a step to increment the printed numbers by. For example, entering 2, 20, 5 means the program prints out 2, 7, 12 and 17 (the second number does not need to be printed out.). Use the **range** parameter.

2. Write a program that calculates the average of a set of numbers entered by the user. The number of numbers that will be entered is unknown. The user will indicate they are done entering numbers by entering zero.

For example, a user could enter the set 2 5 12 6 0. The program adds up  $2 + 5 + 12 + 6$  then divides the sum by 4.

3. Write a Guessing Game program. The program will generate a random number between 1 and 50, inclusive. The user is to enter guesses of that number. If the user's guess is too high, print a message that says, "Too high". If the user's guess is too low, print a message that says, "Too low". If the guess is correct, print a message that says, "You guessed correctly!".

Advanced: Allow the user to first choose a difficulty level. Easy means the user has 9 guesses to guess the number. Hard means 5 guesses.