Counting Backwards

Purpose. Learn how to write a reverse-counting loop. It also get you to use "sleep code" that causes a program to pause for a specified period of time. Also learn that "sleep code" is different between Windows and Mac, and how to write code that works on either system. Finally, learn about $'\r'$ -- the "carriage return" symbol -- and what it does in console output.

Requirements. Write countdownTimer.py, to count down from 10 to 0, one number at a time, pausing one second per number. The program should take 10 seconds to run, starting with the 2-digit output "10", overwriting it with "9", and then "8", etc, until it reaches "0" and ends. Then print some statement on the next line after "0" is reached, such as "blast off".

NOTE: "Overwrite" means that each line of output should erase the previous one, just as in the odometer example from chapter 7. The \r and the flush statement accomplish this.

NOTE: It should *not* be 09, etc. The 10 should be replaced by a space and a 9. Not a 0 and a 9, and not a 9 and a space. Don't overthink this -- there are several ways to do it, including formatting, or ifelse structures, etc.

Do *not* include extra text or spaces in the output. The first "10" should be fully left-justified with no spaces of text before it or after it. The "9" through "0" should be printed with a single space in front, only -- nothing else before or after it.

Program I/O. <u>Input</u>: none. <u>Output</u>: A series of numbers overwriting one another on the same line of the console screen, and an ending "blast off".

Examples. Here's what the output should look like:

When it starts... 10

When it ends... 0 blast off!