Lab 02 - Assignment

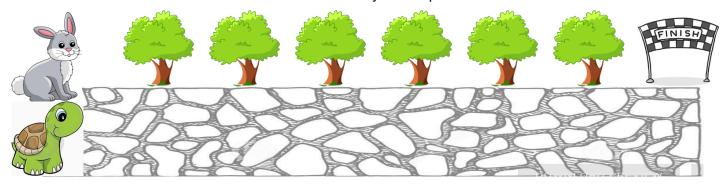
More Python Basics

CS 112 – Summer 2022

Description

In the last race, the tortoise beat the hare, so the hare wants revenge, but it seems that he did not learn the lesson and in the new competition the hare stops every time he finds a tree to take a minute nap and keep going again.

The raccoon wants to make a bet but he wants your help to find out who will win the race.



Facts you already know:

- The distance from the start to the finish line is 7 yards.
- Between the start and the finish there are 6 trees separated by one yard each.
- The tortoise never stops and moves forward at a constant speed.
- The hare always takes the entire nap (not a second more or a second less)

Inquire:

- Speed of runner 1 in **ypm** [yards per minute]
- Speed of runner 2 in **ypm** [yards per minute]

Assume:

- runner 1 can be either (use the speed values to find out who is runner #)
- The tortoise advances more slowly (or at most the same) than the hare
- Speed ranges in [0.5 7]
- Input user is correct and given as float

The racoon wants your help to know:

- How long does it take for the hare to reach the finish line?
- How long does it take for the tortoise to reach the finish line?

NOTE: Give the time in the format mm'ss",

Example: If the tortoise takes 10.5 minutes, you must show 10'30"

Allowed things:

- Any arithmetic operators are all fine to use, such as +, -, *,**, /, %, and, or, =, etc.
- The following data types, and their casting functions: int, float, string.
- These functions only: input(), print(), round(), max(), min()

Disallowed things:

- You may not import other modules (like math) or write your own functions.
- No branching (if statements), or loops (for/while), or any other feature we haven't yet covered in class.