

Title

How fast am I going?

Problem Description:

In this problem you will write two functions and your own main function to test it.

Function 1: write a function that takes two doubles as input: force and mass. The function should return the acceleration of a particle with the given mass for the given force.

Function 2: write a function that takes two doubles as input: acceleration and time. The function should return the final speed of the particle that has been accelerating at the given acceleration for the given time. You may assume that the initial speed is zero.

Main: write a main program that prompts the user for a mass, force, and time, and outputs the final velocity of the particle. This program must use Function 1 to compute the acceleration, and then it must use that acceleration when calling Function 2 to compute the speed.

Testing

Test input	Expected Output
1 1 1	1
10 5 1	0.5
10 2 0	0
10 -2 1	-0.2
5 10 20	40

Time Target

- *** less than 10 minutes
- ** 10-20 minutes
- * greater than 20 minutes

Section

functions